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Vicky Katsoni
Marival Segarra-Oña *Editors*

Smart Tourism as a Driver for Culture and Sustainability

Fifth International Conference IACuDiT, Athens 2018

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Editors

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Editors
Vicky Katsoni
University of West Attica
Athens, Greece

IACuDiT
Athens, Greece

Marival Segarra-Oña
Business School
Universitat Politècnica de València
Valencia, Spain

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Preface

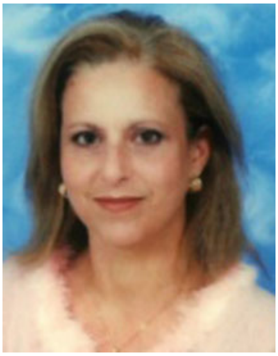
Tourism, which is economically supporting entire regions and even countries, must be considered as an innovative industry constantly looking for creating competitive advantages. The era where the historical sites or the privileged location of a destination was, by itself, enough for attracting tourist has gone, giving the flow to those destinations that are able to offer the visitors new and enhanced experiences, and to those that benefiting from the comparative advantages by adding extra value through innovative services linked to technology and data, sustainability, and accessibility.

This is a new concept that has been named "smart destination" and goes one step beyond smart tourism by linking not only the tourism industry but also the different stakeholders that take part, as public and private cultural institutions, entertainment, transportation, energy and infrastructures responsible, etc. Cities are looking for scaling positions in the ranking of the best efficiently managed, considering aspects such as transportation, safety, economy, public spaces, communications, and also sustainability. In this race to become the smartest cities, smart tourism has appeared to join the conversation.

While being connected to the smart city concept, smart tourism needs an actor, a user highly connected to the Internet and to any available technology that continuously seeks for information and discovers the destination from a modern and different perspective. The tourist engages in the destination by searching and analyzing data and reviews; gastronomy, culture, and experiences are now part of the "smart game" and are here to stay.

That is why analyzing all the angles of smart tourism plays a key role in the current academic research and the reason the 5th International IACuDiT Conference used the lemma: "Exploring Smart Tourism: The Cultural and Sustainability Synergies". We express our sincere gratitude and appreciation to the people, universities, and organizations for their contributions, help, and support for this conference.

This is the future, and it is here to stay; the more aware we are, the most we, countries, regions, industries, and businesses, will be able to benefit from working together to shift the idea of just buying a plane ticket and booking a hotel room from the whole smart touristic experience that new clients are looking for.



Athens, Greece Vicky Katsoni

Valencia, Spain Marival Segarra-Oña
July 2018

Contents

Part I Innovation in Tourism

1 Innovating and Diversifying Cultural Tourism in Europe Through Smart Movie Tourism in UNESCO Sites and Destinations. The Case Study of FAMOUS Project 3
Giusy Cardia, Andrew Jones and Daniele Gavelli

2 Big Data Analytics in Smart Tourism Destinations. A New Tool for Destination Management Organizations? 15
Tomáš Gajdošík

3 Educating of Entrepreneurship Competence in Pre-university Education System: An Effective Way for Tourism Development and Innovation 35
Robert Gjedia and Valentina Ndou

4 Entrepreneurship and Co-evolution in Tourism 49
Marco Valeri and Leslie Fadlon

5 Project ArchaeoCulTour: Innovative Valorization of Archaeological Heritage in Istria County Through Sustainable Cultural and Creative Tourism 61
Kristina Afrić Rakitovac, Nataša Urošević and Nikola Vojnović

6 The Innovative Health Tourism's Environmental Management Sustainable Design Facilities Assessment Capability 79
Tilemachos K. Koliopoulos and Vicky Katsoni

7 The Concept of Dichotomy of the Innovation Process in an Enterprise 89
Leszek Koziol and Michal Koziol

8 Value Creation in Service Over the Last Two Decades: A Meta-Analysis 103
Abdelouahab El Boukhari, Rachid Oumlil and Allal Achaba

9 Innovative Cultural Tours in Athens: An Interesting Internship in the Era of Economic Crisis 121
Efthymia Sarantakou and Simos Xenitellis

10 Hotel Innovation and the Creation of Competitive Advantage 135
Georgia Yfantidou, Eleni Spyridopoulou, Thekla Chatzigeorgiou and Paraskevi Malliou

Part II Shedding Lights on the Potentials of Special Types of Tourism

11 Religious Tourism Development in Lesvos Island. Potentials and Prospects in a Spiritual Approach of Priests of Lesvos 147
Konstantinos Mouratidis, Maria Doumi and Theodoros Stavrinoudis

12 Dark Tourism, the Dark Side of Cultural Tourism. Application to the City of Porto 163
Dália Liberato, Pedro Liberato and Andreia Gonçalves

13 The Potential of Street Art. Obstacles to the Commercialization of Street Art and Proposed Solutions 179
Virginia Santamarina-Campos, María de-Miguel-Molina, Blanca de-Miguel-Molina and Marival Segarra-Oña

14 Agrotourism: A Lever for Rural Development Based on the Cultural Reserve of Greece 193
Maria Karagianni, Stavroula Georgakopoulou and Vasiliki Delitheou

15 Philoxenia as a Component of the Tourism Experience in Culture and Total Quality Management in Hotel Sector 207
Katsaitis Aristides and Papaefthimiou Efi

16 Museum Cluster in a Small City: Evidence from Russia 223
Marina Sheresheva and Elena Kondyukova

17 Tourist Sub-destinations: Shedding Light on a Neglected Touristic Behavior 237
Markos-Marios Tsogas, Evangelia Chatzopoulou and Iliana Savva

18 The Semiotic History of Thermal Springs and Their Contribution to Tourism Development 249
Sofia Tsiftelidou and Anastasia-Charikleia Christodoulou

19 Unveiling the Profile of Tourists in Islands with Protected Areas to Promote Sustainable Tourism 261
Aristotelis Martinis, Katerina Kabassi, Georgios Karris and Charicleia Minotou

20 Motives and Involvement of Tourists in Eastern Macedonia & Thrace 275
Antonios S. Dalakis, Georgia Yfantidou and George Costa

Part III Tourism Online

21 Impact of Social Media and Proprietary Media on Potential Tourists Holiday Planning Process. The Case of National Tourism Organizations 295
George Papadopoulos, Panagiota Dionysopoulou and George M. Agiomyrgianakis

22 Internet Marketing Communication of Destination Management Organizations in Slovakia: The Case Study 315
Radka Marčeková, Ľubica Šebová and Kristína Pompurová

23 Online Hotel Customer's Perceived Service Quality and Purchase Intentions 329
Anna Kourtesopoulou and John Kehagias

24 The Impact of Online Travel Agencies Web Service Quality on Customer Satisfaction and Purchase Intentions 343
Anna Kourtesopoulou, Sofia-Danai Theodorou, Athanasios Kriemadis and Alkistis Papaioannou

25 A Systematic Literature Review on Social Media Analytics and Smart Tourism 357
Marlon-Santiago Viñan-Ludeña

26 What is Affecting Customers' Intention to Perform Social Media Marketing Activities in the Hotel Industry? 375
Anastasios-Ioannis Theocharidis, George Karavasilis, Vasiliki Vrana, Evangelos Kehris and Konstantinos Antoniadis

27 Shaping the Consumers Behavior Who Are Using Airbnb—The Case of Airbnb's Users in Greece 393
Dimitrios Belias, Ioannis Rossidis and Efstathios Velissariou

28 Towards Developing Smart Cities: Evidence from GIS Analysis on Tourists' Behavior Using Social Network Data in the City of Athens 407
Athanasios Koutras, Ioannis A. Nikas and Alkiviadis Panagopoulos

29 **Porto as a Smart Destination. A Qualitative Approach** 419
Pedro Liberato, Elisa Alén and Dália Liberato

30 **An Analysis of the Electronic Presence of National Parks in Greece** 433
Aristotelis Martinis, Athena Papadatou and Katerina Kabassi

31 **Towards Smart Creative Tourism** 451
Lino Trinchini and Thanasis Spyriadis

Part IV Tourism Management and Structure

32 **Central Government Tourism Policy and the Development of Sports Tourism in Mass Tourism Areas: The Case of Crete** 469
Leonidas Gaitanakis, Ourania Vrondou and Stella Leivadi

33 **International Sports Bodies Application of Ecological Sustainability Mechanisms Affecting Sport Tourism Related Natural Environment** 481
Ourania Vrondou, Panagiotis Dimitropoulos and Leonidas Gaitanakis

34 **Burnout and Job Satisfaction: The Case of Physical Education Teachers in Local Sports Organizations** 503
Evangelia Papasotiriou, Georgios Sidiropoulos, Stamatis Ntanos, Miltiadis Chalikias, Michalis Skordoulis and Dimitris Drosos

35 **Emotional Intelligence of Employees in the Hospitality Sector: Exploring Its Effects on Job Satisfaction and Performance** 515
Konstantinos Koronios, Athanasios Kriemadis, Panagiotis Dimitropoulos, Ioannis Douvis, Andreas Papadopoulos and Genovefa Manousaridou

36 **Enhancing Airports' Employees Job Satisfaction with Training Techniques. Investing on IM.I.A. and the Case of Greek Airports' Ground Handling Services** 527
Dimitris Papayiannis, Sofoklis Skoultsos and Alexios-Patapios Kontis

37 **Examining the Organizational-Financial Structure of Public-Private Destination Management Organizations** 543
Isabel Carrillo-Hidalgo and Juan Ignacio Pulido-Fernández

38 **The Impact of Corporate Culture in the Performance of the Front Desk Employees—The Case of Five Star Hotels in Greece** 563
Dimitrios Belias, Christos Mantas and Dimitrios Tsiotas

39 **The Synthesis of the Variables Formulates Rewards System Culture (ReSCulture)** 577
Theodoros Stavrinoudis and Christos Kakarougkas

40 The Contribution of HRM on the Development of Effective Organizational Culture in Hotel Units — The Case of Greek Hotels 603
Dimitrios Belias, Efstathios Velissariou and Ioannis Rossidis

41 How to Overcome the Challenges of Using Netnography in Tourism Research? Reflections on a Ph.D. Journey 619
Medéia Veríssimo and Carlos Costa

42 Governance and Sustainability of Cultural Megaprojects. Case Studies from Spain 633
Xosé Somoza Medina

43 Earnings Predictability of the Greek Hospitality Industry During the Crisis 647
Panagiotis E. Dimitropoulos, Ourania Vrondou and Konstantinos Koronios

Editorial

The 5th International Conference of the International Association of Cultural and Digital Tourism (IACuDiT) was held in Athens, Greece, in June 28–30, 2018, with the theme "Exploring Smart Tourism: The Cultural and Sustainability Synergies". The aim of this conference was to gather culturally diverse participants from academia, industry, government, and other organizations, in order to discuss and develop new perspectives in the field of tourism, travel, hospitality, culture and heritage, leisure, and sports within a knowledge society in a sustainability context.

This proceedings includes many of the papers presented and reflects the diversity of issues, ideas, and innovations that make up tourism as we see it today, and it consists of the following four parts:

Part I: "Innovation in Tourism"

This part consists of the following ten chapters that consider the many aspects of innovative ideas and applications in the tourism industry:

Chapter 1 by **Giusy Cardia**, **Andrew Jones**, and **Daniele Gavelli** aims at presenting the "*Innovating and Diversifying Cultural Tourism in Europe Through Smart Movie Tourism in UNESCO Sites and Destinations. The Case Study of FAMOUS Project*". The authors aim to explore the psychology of film tourism, media consumption, and innovative technologies, which provides a clear example of the early stages of cross-disciplinary study, which also highlight the need to apply rigorous methodologies for the development of screen-based tourism. The literature review is focused on the screen tourism paying as special attention to the UNESCO sites and destinations which are the target of the EU-funded project FAMOUS (***F****ilm festivals* ***A****nd* ***MO****vie tourism at* ***U****nesco* ***S****ites*). The project has been chosen as the research case study as an example of best practice aimed to develop a methodology based upon the integration between the tourism industry and film and TV productions and movie festivals which aims to develop a "smart movie tourism product" based upon itineraries where communities and relevant stakeholders are actively involved from the beginning of the process. In this context, selected UNESCO sites and destinations are promoted as cases in line with sustainability development principles.

Chapter 2 by **Tomáš Gajdošík** is titled "*Big Data Analytics in Smart Tourism Destinations. A New Tool for Destination Management Organizations?*". The aim of the paper is to find out the possibilities of overcoming challenges of today's DMOs based on the analysis of current state and best practices of big data analytics in tourism destinations. The analysis is based on multiple case studies, with the main focus on the Central Europe. The paper presents a conceptual view on big data analytics and concludes that the application of big data analytics allows DMOs to better define destination boundaries, understand the needs of today's tourists, effectively manage destination stakeholders, and be more competitive and sustainable.

Chapter 3 by **Robert Gjedia** and **Valentina Ndou** is about "*Educating of Entrepreneurship Competence in Pre-university Education System: An Effective Way for Tourism Development and Innovation*". The objective of this paper is to present the results of a desk and field explorative analysis aimed to provide insights and models for realizing entrepreneurial skills' curriculum in all cycles of a pre-university education system, and also in higher education schools in a developing country context, such as Albania. In doing this, the authors focus on comparing a US model of content entrepreneurship with entrepreneurial competence in the official curriculum of Albanian education. In this sense, this paper is a support to the development of entrepreneurship competence and tourism development, as an integrated way in the implemented curriculum, especially for the pupils of pre-university education in Albania.

Chapter 4 by **Marco Valeri** and **Leslie Fadlon** examines the "*Entrepreneurship and Co-evolution in Tourism*". The aim of the paper is to verify whether the nature of the relationship between a tourist destination and tourist enterprises operating within its territory can be defined as co-evolutionary. The authors conduct an extensive literature review on articles and papers dealing with innovation adoption, published in the last 41 years, i.e., from 1976 to 2017. They run content and structural analysis on the collected data. The analysis perspective which is considered the most appropriate to qualify the nature of the relationship among a given tourist destination and its tourist enterprises is the co-evolutionary perspective. The co-evolutionary process implies the identification of a governance body able to exploit and enhance the systemic resources made available by the territory and to inspire the management approach of the different tourist enterprises.

Chapter 5 by **Kristina Afrić Rakitovac**, **Nataša Urošević** and **Nikola Vojnović** is titled "*Project ArchaeoCulTour: Innovative Valorization of Archaeological Heritage in Istria County Through Sustainable Cultural and Creative Tourism*" and deals about the conceptual and analytical framework for the research on the development potential of archaeological heritage in Istria County, Croatia, through sustainable tourism. Starting from the comparative analysis of the European as well as regional and national best practice in valorization of this specific category of heritage, the authors propose the innovative research methodology and the most appropriate models of sustainable valorization of archaeological heritage.

Chapter 6 by **Tilemachos K. Koliopoulos** and **Vicky Katsoni** examines "*The Innovative Health Tourism's Environmental Management Sustainable Design Facilities Assessment Capability*". This paper is presenting an integrated framework based on a comprehensive and analysis of the community health centers and sustainable design facilities in health tourism-related facilities. The study reveals not just common ground and differences that might be anticipated, but also important sustainability dimensions that are lagging or require much greater attention, such as environmental management, sustainable designs, monitoring, and public health protection of tourists. A preliminary framework of "sustainable community-based tourism" (SCBT) is forwarded that attempts to provide innovative operational solutions in health tourism's facilities. Critical directions are presented making useful conclusions to progress research and development in sustainability-oriented practices toward more effective sustainable designs and operational management of tourism facilities in Greece and the surrounded Mediterranean region.

Chapter 7 by **Leszek Koziol** and **Michal Koziol** is about "*The Concept of Dichotomy of the Innovation Process in an Enterprise*". The paper describes models of the innovation process, concepts of the innovativeness system, and models of the innovative activity of a firm. The authors assert that the elements of these objects are a coherent entirety. The aim of the article is to present the concept of the dichotomy of the innovation process in an enterprise and indicate the way of using it in practice. Two autonomous processes, crucial for the development of innovativeness, are distinguished in this concept, namely the process of innovation invention in its immaterial form and the process of innovation implementation which has got material and immaterial characters.

Chapter 8 by **Abdelouahab El Boukhari**, **Rachid Oumlil**, and **Allal Achaba** is focused on the "*Value Creation in Service Over the Last Two Decades: A Meta-Analysis*". The authors conducted a meta-analysis of value creation in service by addressing the following questions: What is value creation? What are the indicators mobilized in value creation literature in service? This literature review covers a period from 1996 to 2017. The objective of this study is to provide a better understanding of value creation, as well as to conceptualize this concept in service based on the commonly cited indicators.

Chapter 9 by **Efthymia Sarantakou** and **Simos Xenitellis** is titled "*Innovative Cultural Tours in Athens: An Interesting Internship in the Era of Economic Crisis*". The scope of the paper is to examine the qualitative characteristics of a new touristic and cultural industry emerging in Athens, that of producing alternative tourism cultural tours and explores research questions such as the characteristics of a new entrepreneurial culture that was formed in times of economic crisis and of a simultaneous increase in tourist demand in Athens and also to which extent these new touristic products follow cultural consumer trends.

Chapter 10 by **Georgia Yfantidou**, **Eleni Spyridopoulou**, **Thekla Chatzigeorgiou**, and **Paraskevi Malliou** is focused on "*Hotel Innovation and the Creation of Competitive Advantage*" and deals about the innovative factors and their effect on maximizing the efficiency of the services provided by the hotel accommodation. This paper is an introduction of new innovative ideas for further research and development of issues related to hotel services. The authors assert that as the competitive environment is increasing, the solution for hotels is to be competitive and work under systematic strategy using innovative ideas and create personal products for each customer for a unique stay.

Part II: "Shedding Lights on the Potentials of Special Types of Tourism"

This part consists of the following ten chapters that elaborate on the various kinds of tourism:

Chapter 11 by **Konstantinos Mouratidis**, **Maria Doumi** `and **Theodoros Stavrinoudis** examines the "*Religious Tourism Development in Lesvos Island. Potentials and Prospects in a Spiritual Approach of Priests of Lesvos*". The paper aims to present the opinions of the priests of Lesvos on the current situation of religious tourism in Lesvos and explore the potentials and prospects for the further development of religious tourism and formulate policy proposals for its systematic development. The survey highlighted the need for the implementation of an integrated strategic planning for local tourism development, which through targeted actions will cover the basic strategic directions for further development of religious tourism in the island.

Chapter 12 by **Dália Liberato**, **Pedro Liberato**, and **Andreia Gonçalves** titled "*Dark Tourism, the Dark Side of Cultural Tourism. Application to the City of Porto*" investigates Dark Tourism's potential in the city of Porto and to sensitize the Destination Management Organizations (DMOs) in Porto to the opportunity of this market, through 178 questionnaires, applied to tourists/visitors in the city of Porto. This research confirmed some objectives, variables, and proposed fields.

Chapter 13 by **Virginia Santamarina-Campos**, **María de-Miguel-Molina**, **Blanca de-Miguel-Molina**, and **Marival Segarra-Oña** presents "*The Potential of Street Art. Obstacles to the Commercialization of Street Art and Proposed Solutions*". European Union street art industry produces annually over 180,000 new works, playing an active and vibrant role in urban environments by modifying the perception of its surroundings. The unique style, energy, and innovation of street art have also a huge potential to be reused and inspire other cultural and creative industries, being in fact a vital economic driver for most CCIs. However, the authors claim that the numerous online collections of street art photographs are poorly managed and inefficiently catalogued, making content difficult to repurpose and reuse by potential users for their needs.

Chapter 14 by **Maria Karagianni**, **Stavroula Georgakopoulou** and **Vasiliki Delitheou** is titled "*Agrotourism: A Lever for Rural Development Based on the Cultural Reserve of Greece*". The authors claim that the Greek experience and reality has so far proved that agrotourism is moving within a framework that defines it: the protection of the natural environment, the respect for folk architecture and folk tradition, the revival of old rituals, and the sincere human contact. Many initiatives and actions have been promoted in the past for the consolidation and expansion of agrotourism in the country, such as European structural programs and opportunities offered by Leader I, II, and Leader +. Nevertheless, the "agrotourism idea" in Greece is still going through the first steps.

Chapter 15 by **Katsaitis Aristides** and **Papaefthimiou Efi** examines "*Philoxenia as a Component of the Tourism Experience in Culture and Total Quality Management in Hotel Sector*". The authors claim that the concept of Philoxenia ensures the framework for the sustainability of tourism development and is identified with its principles: the participation of the host society in tourism activity, preservation and respect for its cultural identity, respect for the natural environment, experiencing authenticity and a state of being like a local, for the tourist. Philoxenia leads to the creation of a tourist culture in the meaning that tourism as an economical sector, under these rules and principles, becomes a cultural factor toward sustainability and development.

Chapter 16 by **Marina Sheresheva** and **Elena Kondyukova** is focused on "*Museum Cluster in a Small City: Evidence from Russia*" and deals about the specificity of small museum forms that have developed over the past decade. The case of the small peripheral Urals city of Irbit is analyzed in the context of the cultural urban environment. The opportunities to form museum cluster in Irbit are identified, strengths and weaknesses of prospective cluster development are discussed, and recommendations for small museums further development are offered, with special attention paid to logistics, technical equipment, and infrastructure issues.

Chapter 17 by **Markos-Marios Tsogas, Evangelia Chatzopoulou**, and **Iliana Savva** in "*Tourist Sub-destinations: Shedding Light on a Neglected Touristic Behavior*" deals about the destination decision making of tourists, when they decide on visiting a sub-destination within a primary one, by using the island of Aegina, an important and well-known sub-destination of Athens, in Greece as a case study. A number of implications for the practice of marketing of tourism destinations are being developed, mainly by identifying the target markets that visit a sub-destination. The authors claim that understanding the reasons for visiting sub-destinations and the value that tourists derive from their visits enables the development of solid marketing programs, targeted at the enhancement of the experience of tourists in sub-destinations.

Chapter 18 by **Sofia Tsiftelidou** and **Anastasia-Charikleia Christodoulou** is about "*The Semiotic History of Thermal Springs and Their Contribution to Tourism Development*". The aim of this study is the emergence of the rich natural wealth in Greece regarding the number of thermal spas and the possibility of utilizing all sources with corresponding benefits to the economy. The authors assert that the formulation of a proposal for a flexible institutional framework regarding this kind of tourism is essential.

Chapter 19 by **Aristotelis Martinis**, **Katerina Kabassi**, **Georgios Karris**, and **Charicleia Minotou** focuses on "*Unveiling the Profile of Tourists in Islands with Protected Areas to Promote Sustainable Tourism*" and deals about the profile and the type of tourists that visit islands with protected areas such as national parks or

Natura 2000 areas. The results of their survey could help local authorities to understand the perceptions of tourists, as visitors' profile and preferences analysis are crucial for the compilation of a strategic plan, as well as for the implementation of an adapted environmental policy.

Chapter 20 by **Antonios S. Dalakis**, **Georgia Yfantidou**, and **George Costa** examines the relationship between "*Motives and Involvement of Tourists in Eastern Macedonia & Thrace*" and investigates the motives and the involvement of tourists on vacation. The article proposes many and important options in outdoor recreational activities in Eastern Macedonia and Thrace. At a theoretical level, this study is expected to help in developing tools for measuring tourism experience and practically to direct advertising costs for public and private operators by presenting the advantages of the region and tourists' selections. From all the above interventions, the indirect and immediate beneficiaries will be the tourists of the area to whom the research ultimately aims as its final recipients.

Part III: "Tourism Online"

The following eleven chapters deal with various aspects of Internet presence and effect in the tourism industry:

Chapter 21 by **George Papadopoulos**, **Panagiota Dionysopoulou**, and **George M. Agiomyrgianakis** examines the "*Impact of Social Media and Proprietary Media on Potential Tourists Holiday Planning Process. The Case of National Tourism Organizations*". The authors investigate the nature of the usage of social media platforms and its perceived importance reaching the conclusion that although potential tourists seem to prefer the official touristic marketing portals of NTOs they simultaneously perceive the content as less useful than that of other social media platforms. The authors claim that NTOs must update their marketing portals more often and possibly rely more on intermediate thematically focused microsites which can link to their main marketing portals.

Chapter 22 by **Radka Marčeková**, **Ľubica Šebová**, and **Kristína Pompurová** is titled "*Internet Marketing Communication of Destination Management Organizations in Slovakia: The Case Study*", investigates the Internet marketing communication of all Destination Management Organizations in Slovakia, identifies the current status, and outlines the possibilities for further development. The authors assert that there are still unused opportunities for better promotion of individual regions in the tourism market, which are outlined in their study.

Chapter 23 by **Anna Kourtesopoulou** and **John Kehagias** is about "*Online Hotel Customer's Perceived Service Quality and Purchase Intentions*" and investigates the preferences of online hotel customers on service quality and their purchase intentions. The results of their study provide valuable information about the particular needs and motives at a level of their quality preferences in an online hotel environment as well as their purchase intentions. The authors claim that hotels need to place their emphasis in the customization of their Web sites, in order to provide high-quality customer service experience.

Chapter 24 by **Anna Kourtesopoulou**, **Sofia-Danai Theodorou**, **Athanasios Kriemadis**, and **Alkistis Papaioannou** examines "*The Impact of Online Travel Agencies Web Service Quality on Customer Satisfaction and Purchase Intentions*". The rapid growth of the Internet usage confirms that Web sites consist a critical competitive resource for tourism firms. In this dynamic environment, it is important for online travel agencies to fully understand what aspects of the Web site affect the perceived quality and to provide Web services that fulfill online consumers' needs. The main goal of the study was to investigate the effect of perceived quality on customers' overall satisfaction and purchase intentions of online travel agency services. The results of the study indicated that among all the quality factors, the ease of understanding, response time, and the Web site-intuitive operation (ease to use and navigation) emerged as the most important.

Chapter 25 by **Marlon-Santiago Viñan-Ludeña** in the article "*A Systematic Literature Review on Social Media Analytics and Smart Tourism*" analyzes the state of the art by identifying the most important issues related to Social Media Analytics and Smart Tourism (SMAST) and offers some guidelines for future research through a Systematic Literature Review (SLR). The author points out that the use of data generated by users in social networks and Smart Tourism are topics of great interest for researchers in tourism; challenges, opportunities, and emerging approaches in SMAST are also presented.

Chapter 26 by **Anastasios-Ioannis Theocharidis**, **George Karavasilis**, **Vasiliki Vrana**, **Evangelos Kehris**, and **Konstantinos Antoniadis** elaborates on "*What is Affecting Customers' Intention to Perform Social Media Marketing Activities in the Hotel Industry?*". Social media marketing is a connection between brands and consumers, offering a personal channel for user-centered networking and social interaction. This research employs constructs adapted from the Technology Acceptance Model, integrates them with other constructs, and investigates factors affecting Greek consumers' acceptance of social media marketing in the hotel industry. The conceptual model is tested using Structural Equation Modeling (SEM) analysis. The study identifies six factors that directly or indirectly influence intention to perform social media marketing activities. These factors are perceived ease of use, perceived usefulness, permission-based acceptance, fear about social media marketing, social media use, and attitudes toward marketing with social media. The model raises fundamental issues that hotel managers, decision-makers, and social media specialists should take into account to increase customers' intention to perform social media marketing activities, like booking and using social media applications.

Chapter 27 by **Dimitrios Belias**, **Ioannis Rossidis**, and **Efstathios Velissariou** is titled "*Shaping the Consumers Behavior Who Are Using Airbnb—The Case of Airbnb's Users in Greece*". The paper examines the case of Airbnb in Greece, and based on the existing literature, it concludes that there are some factors which differentiate it from traditional hotels, that is the interaction with the local culture.

Chapter 28 by **Athanasios Koutras**, **Ioannis A. Nikas**, and **Alkiviadis Panagopoulos** is titled "*Towards Developing Smart Cities: Evidence from GIS Analysis on Tourists' Behavior Using Social Network Data in the City of Athens*". In this work, a density-based spatial clustering method is applied on posts from the Flickr photo-sharing Web service, to analyze geo-tagged data emanating from an urban area. The aim of this research is mainly to reveal the most important spots in well-known landmarks inside an urban area and explore the visiting tendencies of tourists of these spots.

Chapter 29 by **Pedro Liberato**, **Elisa Alén**, and **Dália Liberato** examines "*Porto as a Smart Destination. A Qualitative Approach*". This study intends to present a qualitative approach to the consideration of Porto as a smart destination, through the content analysis of conducted interviews with researchers related to the sector, information technology entrepreneurs, and responsible for the main regional and municipal DMOs.

Chapter 30 by **Aristotelis Martinis**, **Athena Papadatou**, and **Katerina Kabassi** is "*An Analysis of the Electronic Presence of National Parks in Greece*". The authors assert that the quality of a Web site plays an important role on perception the visitors or potential visitors acquire about the management body of the protected area. In this paper, they make an analysis of the 26 Web sites of the national parks that own a Web site and provide the concluding remarks on the electronic presence of national parks in Greece.

Chapter 31 by **Lino Trinchini** and **Thanasis Spyriadis** is titled "*Towards Smart Creative Tourism*". Tourist destinations have increasingly developed creative tourism strategies to enhance competitiveness and for urban regeneration. The growth of creative tourism can be associated with the diffusion and use of advanced Information and Communication Technologies (ICTs). This paper explores the current trends in creative tourism to find elements of convergence with smart tourism. In doing so, the paper focuses on the role of technology, the business context, and the social dimension as key components of the emerging smart creative tourism phenomenon. The need for an all-encompassing approach to smart creative tourism development is finally suggested by proposing some potential lines of further research.

Part IV: "Tourism Management and Structure"

This part reflects the various structural, managerial, and marketing issues in tourism and consists of twelve chapters:

Chapter 32 by **Leonidas Gaitanakis**, **Ourania Vrondou**, and **Stella Leivadi** is titled "*Central Government Tourism Policy and the Development of Sports Tourism in Mass Tourism Areas: The Case of Crete*". The aim of their research is the examination of the reactions expressed within the central government structure regarding a potential sport tourism development on the traditional tourism destination of Crete as part of a rejuvenation strategy. The analysis produced valuable insight into the role of government in policy-making for the development of sports tourism. The study extends to the examination of related stakeholders' interaction with the central tourism-making mechanisms proving that the process of sport tourism development is challenging.

Chapter 33 by **Ourania Vrondou**, **Panagiotis Dimitropoulos**, and **Leonidas Gaitanakis** examines the "*International Sports Bodies Application of Ecological Sustainability Mechanisms Affecting Sport Tourism Related Natural Environment*". The authors seek to utilize the established principles of sustainable development, to be adjusted particularly to the sport tourism function. Using empirical investigation among key sports federations, the study aims to map and distinguish processes through which the sport function can realistically establish a sustainable environment for sport tourism-related services. Through interpretations produced from the identified environmental policies, the study aims to reveal the level and nature of sustainable considerations included in the organizational procedures of international sports bodies.

Chapter 34 by **Evangelia Papasotiriou**, **Georgios Sidiropoulos**, **Stamatis Ntanos**, **Miltiadis Chalikias**, **Michalis Skordoulis**, and **Dimitris Drosos** in "*Burnout and Job Satisfaction: The Case of Physical Education Teachers in Local Sports Organizations*" elaborates on the professional burnout and job satisfaction among physical education teachers who work in local sports organizations of Attica region in Greece. Their results confirm other studies that pointed out physical education teachers' low levels of burnout and high levels of job satisfaction.

Chapter 35 by **Konstantinos Koronios**, **Athanasios Kriemadis**, **Panagiotis Dimitropoulos**, **Ioannis Douvis**, **Andreas Papadopoulos**, and **Genovefa Manousaridou** is titled "*Emotional Intelligence of Employees in the Hospitality Sector: Exploring Its Effects on Job Satisfaction and Performance*" and deals about the associations among the emotional intelligence, job satisfaction, and perceived job performance in hospitality industry. The findings revealed that the ability of an individual to regulate emotions and his mood has a positive and significant effect on job satisfaction as well as on his performance. Moreover, appraisal of emotions in others and social skills had also a positive impact on job satisfaction and performance.

Chapter 36 by **Dimitris Papayiannis**, **Sofoklis Skoultsos**, and **Alexios-Patapios Kontis** is about "*Enhancing Airports' Employees Job Satisfaction with Training Techniques. Investing on IM.I.A. and the Case of Greek Airports' Ground Handling Services*". The scope of the article is to suggest efficient training on the job methods in order to assist airport instructors and executives in their on the job training skills. Thus, to improve employee's satisfaction and ultimately, to increase their performance, firstly, an examination of the theoretical approach is made on Quality Circles, Greek Tourism Industry and Greek Airport Facts and Figures, and results of secondary research.

Chapter 37 by **Isabel Carrillo-Hidalgo** and **Juan Ignacio Pulido-Fernández** in "*Examining the Organizational-Financial Structure of Public-Private Destination Management Organizations*". The authors examine which of the world's biggest city destinations manage tourism through a public–private Destination Management Organization and consider the legal, organizational, functional, and financial structure of such entities, thus assessing their suitability in accordance with the provisions of the scientific literature. Ascertaining the views of these entities themselves about different sources of finance and public–private collaboration can help us to understand the results obtained.

Chapter 38 by **Dimitrios Belias**, **Christos Mantas**, and **Dimitrios Tsiotas** in "*The Impact of Corporate Culture in the Performance of the Front Desk Employees—The Case of Five Star Hotels in Greece*" deals about the following: Organizational culture and business philosophy have been shown to affect the performance of an organization. It is imperative for executives to know the organizational culture of the business in which they work to develop the corresponding strategic goals that will improve the performance of the hotel business and give it a competitive advantage over its rivals. In order to achieve an excellent customer service, it is necessary to know the characteristics of the customer of the hotel business. Services that do not meet customer expectations will prove to be unsatisfactory, so the customer can look for these services in other competing businesses.

Chapter 39 by **Theodoros Stavrinoudis** and **Christos Kakarougkas** in "*The Synthesis of the Variables Formulates Rewards System Culture (ReSCulture)*" deals about a systematic four-year scientific work, aiming to present the synthesis of the ReSCulture (Rewards System Culture) variables, which will be able to investigate and analyze in depth the role of rewards systems in processes of organizational culture change in the hospitality industry. Through the conceptual synthesis of the findings of two theoretical strands, eleven specialized and complex hypotheses have been emerged, which are being investigated by one hundred eleven ReSCulture variables.

Chapter 40 by **Dimitrios Belias**, **Efstathios Velissariou**, and **Ioannis Rossidis** is about "*The Contribution of HRM on the Development of Effective Organizational Culture in Hotel Units—The Case of Greek Hotels*". The authors consider the impact of HRM on the development of an effective culture on hotels, based on material gathered from the existing literature, and provide evidence that most of the HRM departments on Greek hotels seem not to develop effective policies and practices so to leverage their corporate culture.

Chapter 41 by **Medéia Veríssimo** and **Carlos Costa** is titled "*How to Overcome the Challenges of Using Netnography in Tourism Research? Reflections on a Ph.D. Journey*". Their study aims at identifying the challenges in using netnography as part of the research process in tourism. By describing online ethnography as one of the phases of a mixed-methods study, it addresses how challenging can be finding online groups and reaching the right audience, dealing with the amount of online data and applying complementary methods and triangulation in the context of a Ph.D. thesis in tourism. Finally, this study reflects on strategies to overcome those issues in order to contribute to a diversified methodological discussion in tourism academia.

Chapter 42 by **Xosé Somoza Medina** examines "*Governance and Sustainability of Cultural Megaprojects. Case Studies from Spain*". The author supports that cultural megaprojects are complexes of a number of buildings with cultural functions that have required considerable investments from public administrations. They are intended to renew the image of a city through their avant-garde architecture and to constitute a new motor for economic and tourist development. Their governance models differ, but their management structures are usually made up mostly of representatives of the public sector that has financed the megaproject. In this paper, there is an analysis of three cases from Spain whose future sustainability is under political and social discussion.

Chapter 43 by **Panagiotis E. Dimitropoulos**, **Ourania Vrondou**, and **Konstantinos Koronios** is titled "*Earnings Predictability of the Greek Hospitality Industry During the Crisis*" and deals about the issue of earnings predictability of a sample of hospitality firms before and after the burst of financial crisis in the Greek economy in 2011. Their regression analysis pointed out that the cash flow component of earnings is a more significant determinant of future earnings relative to accruals. Also the persistence of the cash flow component of earnings has decreased after the burst of the crisis, and this is attributed to the lower levels of earnings predictability during that period. Their study adds to the existing literature on earnings predictability and persistence of the hospitality industry, suggesting fruitful policy indications.

All the above contributions demonstrate convincingly that the modern tourism industry is still an interesting and evolving area which deserves profound study. Tourism has indeed been a wide-sweeping socioeconomic phenomenon, with broad consequences on all factors of production, and dominates the international scene. IACuDiT acknowledges these roles and tries to contribute to this phenomenon.

Athens, Greece
Valencia, Spain
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Vicky Katsoni
Marival Segarra-Oña

Part I
Innovation in Tourism

Chapter 1
Innovating and Diversifying Cultural Tourism in Europe Through Smart Movie Tourism in UNESCO Sites and Destinations. The Case Study of FAMOUS Project

Giusy Cardia, Andrew Jones and Daniele Gavelli

Abstract Film and television production has increasingly resulted in ways to promote destinations which leads to an increase of visitor numbers to such sites, and in turn expanding the concept of screen-induced travel in academic discourse. This study begins with a review of the literature which shows that tourism induced by film and television is a phenomenon of global significance. However, the screen tourism experience is still an emerging area of study which implies that its future research agenda might well focus on a range of themes and needs. Among themes and needs the authors aim to explore the psychology of film tourism, media consumption and innovative technologies which provides a clear example of the early stages of cross disciplinary study, which also highlight the need to apply rigorous methodologies for the development of screen based tourism. Evidence suggests these methodologies should lead to (i) improve the measurement of impacts and legacy for selected sites, destinations and their communities; (ii) the identification of factors and criteria for the selection of destinations for film and TV production; (iii) the detection of the most relevant trends within screen tourism; and (iv) the potential complementarities between screen tourism and other niche tourism segments in Europe and around the world. The literature review is focused on the screen tourism paying as special attention to the UNESCO sites and destinations which are the target of the EU Funded Project FAMOUS (***F****ilm festivals* ***A****nd* ***MO****vie tourism at* ***U****nesco* ***S****ites*). The Project has been chosen as the research case study as an example of best practice aimed to develop a methodology based upon the integration between the tourism industry and film and TV productions and Movie Festivals which aims to develop a 'smart movie tourism product' based upon

G. Cardia (✉) · A. Jones
University of Malta, Msida, Malta
e-mail: giuseppina.cardia@um.edu.mt

D. Gavelli
University of Cagliari, Cagliari, Italy

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itineraries where communities and relevant stakeholders are actively involved from the beginning of the process. In this context selected UNESCO sites and destinations are promoted as cases in line with sustainability development principles.

Keywords Screen tourism · Destinations · Sites · UNESCO · Festival Sustainability

JEL Classification Z (Other Special Topics)

1 Introduction: A General Overview of Screen Tourism

Today, in postmodern life, especially as far as the newer generations are concerned, the consumption of audio-visual products is more widespread and its' influence on tourism potentially greater than in previous decades. Through movies, people are sometimes induced to visit what they have seen on the screen. However, out of a considerable number of audiovisual products available to audiences only few movies and tv series have actually determined a direct influence on tourism and tourist destinations. Among those movies and tv productions that make visitors think "I want to go there", movies such as Il Postino (Italy), Midnight Express (Malta), Marie Antoinette (France), Kingdom of Heaven (Spain), have tended to influence visitors to visit places not thought of going to before.

The importance of economic and cultural impacts of movies to the reputation and economic growth of destinations has become increasingly important to local destinations, as witnessed by the significant growth of Film Commissions across Europe during the last decades, with cities and regions increasingly competing to attract audio-visual productions and host film festivals. For example the Northern Ireland Film Commission or New Zealand Film Commission.

However, the practice of using film for touristic purposes is not new. For instance, an article found in the Venice Film Festival archive (1939) had already asserted very clearly the relation between films and tourism, showing that between the two World Wars French institutions were already practicing the use of the film industry as a form of "touristic propaganda".

Nowadays the touristic income generated through current successful films and tv series over many continents are reaffirming the potential of film tourism in promoting territories and destinations. Placing a destination in a film as a product represents today a growing opportunity, implemented through the cooperation between local institutions and film production units. It is based on the assumption that film influence on destination image, especially when the location plays a relevant part in the film, "is shaped through the vicarious consumption of film and television without the perceptual bias of promotional material" (Schofield 1996).

With the development of technology, social media and the industry of entertainment, destinations and sites, in particular those belonging to the list of the

World Heritage Sites, have increasingly been at the forefront of new interpretations within the context of films and literature, music, or in other terms, in what is called 'pop culture tourism' (Connell 2005).

This study aims to interpret the need of developing tourism thematic products which links European destinations interested in UNESCO cultural sites that have been hosting, over time, well-renowned movies and film festivals. The aims correspond to the objectives of the FAMOUS project which has been chosen as the case study of this research.

2 Literature Review: Screen Tourism and UNESCO Sites

The phenomenon of motion images utilised as tourism promotion has been referred to in different ways and languages: Film Tourism (Hudson and Ritchie 2006a, b), Television Tourism (Evans 1997), Set-Jetting Tourism (Grihault 2007), Cinematic Tourism (Tzanelli 2007), Filmtourismus (Steinecke 2016), Cineturismo or Cineteleturismo (Provenzano 2007).

The term Film-Induced Tourism (Beeton 2006, 2016; Tzanelli 2007; Cucco and Richeri 2013; Di Cesare 2015), which evolves from movie-induced tourism utilised by Riley (Riley 1994; Riley et al. 1998), points out also to the existence of a non-direct relation between film and tourism.

Today the role of new media devices and content, which are not strictly cinematographic, such as virtual and augmented reality and social networks, seems to be a growing key aspect of film tourism since the terminology used is not just a formal, but a substantial issue. Having said that, it is quite common to use the concept of 'Screen Tourism' (Connell and Meyer 2009) which embraces all kinds of screens and takes charge of the social and transmedia effect related to movies' promotion and reception, from one screen to the other and from one destination to another.

Screen tourism is also connected to the wider concept of pop culture tourism which, according to Beeton (2008), is as a worldwide phenomenon that occurs whereby tourist visit specific locations mentioned in literature, cinematography and music, and is largely based on both authentic and fictitious backgrounds.

People who visit sites for these reasons can be considered as fans and the overall group visitor concept 'fandoms'. Individual fans differ from fandoms which are organized fans'—communities having a collective nature, where individual members share contents with one another. These groups have structure, norms and a mode of engagement. For example the Harry Potter fandom. Being part to these communities implies "a touch point, worldview, philosophy that makes other people, actions, and institutions intelligible" (Hinck 2012). Moreover fandoms are bridges between fans and celebrity and in turn a place or a destination (Grossberg 1992).

The expansion of modern media further expands pop culture involvement in tourism. Among the several types of pop culture tourism, screen tourism is one of the most representative since films, television, internet, video or cinema screen might strongly influence travelling preferences by showing certain features of a specific destination/country, and its culture, nature or sense of place.

Placing a destination in a film or screen production as a product, particularly when locations play a relevant role in the narration, represents a growing opportunity and initiative to a destination. In this context, the cooperation among local institutions and film productions is of particular significance, as the value of promotional advertising provided by some films would be out of the price range for the most of tourism offices and destinations (Took and Baker 1996). Among relevant examples, 'Notting Hill'- London attracts visitors from around the world simply by using the London area as the movie title.

Screen productions are now often considered as a business implemented to generate short-term income and long-lasting revenue for locations and destinations. Besides that, screen tourism might can now also prolong the seasonality of a destination since filming locations can attract all year around visits. However, in general, the peak of tourist interest for filming locations/sites usually comes after the release of the film/movie production. In this respect this is considered the prime 'pulling factor' for visitors (Riley et al. 1998).

Similarly typologies of the 'screen' visitor are evolving and there is now a growing differentiation between a 'screen tourist' and a 'screen location tourist'. Indeed, despite the fact that are both inspired by film or tv production, or cinema, and so on, the screen tourists do not visit the real screen locations but rather the venue which has been shown in a movie, or tv or screen production.

Another relevant difference is between tourist who want to visit 'on-locations' which are physical sites shown in screen productions, which exist in the real environment; and "off-locations" which are created in a film or tv studio. For example among the on-locations, heritage sites such as Valletta in Malta, Dubrovnik in Croatia, the Thingvellir National Park in Iceland, or other natural sites in New Zealand have been used.

Screen tourism is now well established as a niche tourism activity. This does not generally however serve a specific group of audience but rather every film and TV production consists of its own distinct target group with some movie/series attracting more visitors than others (Papathanassis 2011).

As part of the screen tourism 'offer', the screen tourist might follow in the footsteps of favorite actors, or engage with the deep historical meaning of the site or visit the surroundings of the locations where the screen productions have been shot.

An increase of numbers of film tourists now also implies economic benefits for several screen locations. Examples include, the island of Cephalonia in Greece, with the *Captain Corelli's Mandolin*; the Crown Hotel of Amersham in England with *Four Weddings and a Funeral*; Thailand with *The Beach*; Canakkale in Turkey with *Troy*; Wallace Monument in Scotland with *Braveheart.*

Apart from such economic benefits, a screen production location might also increase the cultural value of some sites and destinations uniquely differentiating the site from other localities or destinations (Busby and Klug 2001). In some a higher cultural value can be also extended especially to city locations. In some the impact is even greater, especially in the case of tv series since the site/destinations are often continuously promoted (Hudson and Ritchie 2006a).

However, there are also warning signs. An increase of visitors can also lead to several negative impacts especially when a site is ‘unique’ such as sites listed in the UNESCO world heritage list which can be particularly vulnerable to ‘over’ visitation and generally have limited visitor capacity.

In this respect the World Heritage sites and destinations are places of outstanding universal value which imply that their cultural and natural significance is unique. According to the ‘Operational Guidelines for the Implementation of the World Heritage Convention’ (2016), they are defined as sites of common importance for present and future generations, which in turn represent a particular cultural, societal or historical value and in turn relate to notions of cultural memory and identity. That aside, cultural and natural heritage sites have both tangible and intangible cultural aspects which make such sites increasingly attractive for visitors. Indeed, by visiting UNESCO sites, tourists look for new meaningful experiences, inspiration, or connection and understanding with a particular place.

According to Strinati (2004) UNESCO sites and destinations have their specific significance, uniqueness and meaning, which popularity increase further when they become attractions for pop-culture tourism.

However, an increase in the numbers of visitors may generate overcrowdings that can lead to the commodification of heritage, affect the visitors’ experience, and represent prejudice for a site’s conservation and protection. Authenticity becomes a key issue in this context, which can seriously have impacts on the visitor experience and visitor aspirations especially for spiritual/religious connotations (Garrod 2008).

In the case of screen tourism, which has a tendency to attract visitors through storylines or fantasy, or as a part of a romantic gaze, the issue of authenticity is even a more sensitive issue (Busby and Klug 2001). Indeed, screen tourists are more attracted by storylines and image and fantasy rather than authenticity unlike the case of the other niche tourism segments. (Roesch 2009), (Gjorgievski and Melles Trpkova 2012). Moreover, in terms of site conservation, screen tourists, may not, in some instances, take into account that they are visiting a site with a unique historical and cultural value and that their inappropriate behavior could irremediably could adversely affect the sites they are visiting.

In these cases, the capacity for management to face these issues by for example, increasing, the number of employees at sites or monitoring the sites more effectively or ensuring implementation tools to control the tourist flows are growing challenges. Indeed, developing a screen tourism product which takes into account these needs and the needs of all the relevant stakeholders involved at UNESCO sites and destinations provides some salutary thoughts and pointers for future management needs in this respect.

That aside, from a more pragmatic European project perspective, the case study used for this research (an EU funded project) provides an interesting perspective. The intrinsic cultural value and the business opportunities offered by European film heritage are recognised by the EU Parliament which has issued the Recommendation on Film Heritage (2005/865/CE). As an essential component of such, European cultural heritage and film heritage can represent a source of historical information about European society, the richness of Europe's cultural identities and the diversity of its people. Cinematographic images are providing and increasing crucial element for learning about the past and for reflection upon European culture, diversity and civilisation. Moreover, they are of paramount importance for narrating European sense of place and local destinations. The important task at hand however is balancing such contemporary notions with the effective continuation for the protection and conservation of European cultural heritage.

3 Methodology. The Paths of an Applied Research in Screen Tourism

The study of the implementation of screen tourism product in UNESCO sites and destinations emerges from a call for proposal aiming to co-fund projects developing and promoting transnational tourism products related to the Cultural and Creative industries (CCI) subsector "cultural heritage". The call has been issued by the Executive Agency for Small and Medium-sized Enterprises (below EASME) within the COSME-TOURCCI Programme in 2017 and it focuses on the use of CCIs-related technologies in promoting tourism products and enhancing visitors' experience. As part of the COSME-TOURCCI programme rules, the consortium includes, among others, a managing authority of a UNESCO cultural site included in the world heritage list.

Starting from this premise, the research aims to develop a thematic product which represents an original but common denominator among UNESCO sites and destinations, and which can be enhance the visitors' experience by using technologies.

Recognizing screen tourism as a modern global phenomenon within the pop culture tourism umbrella, and characterized by screen tourists, either fans or fandoms, in search of fantasy more than authenticity, the research has identified this as the most suitable niche tourism segment for developing a thematic product for enhancing the visitors' experience by using technologies. The research is planned in key stages or steps. For example:

Step 1: the research aims to map the UNESCO cultural sites and destinations in the 28 EU countries as the eligible territories of the COSME Programme, starting from the World heritage list updated to May 2017.
Step 2: the research aims to undertake desk research on movie tourism, which aims to identify films shot in the UNESCO sites and destinations mapped in the first research step.
Step 3: the research aims to create an inventory of movies shot in several UNESCO cultural sites in some European countries.

The proposal entitled FAMOUS- Film festivals And MOvie tourism across Unesco Sites, was submitted in June 2017, and officially started in May 2018 and launched in June 2018. Hence, this study has been built upon a project with the identification of at least twenty relevant stakeholders per country which have been listed in the FAMOUS stakeholders' database created ad hoc for the project upon the application form, and as one of the project deliverables.

The stakeholders' database, is also a management tool which can be constantly updated throughout the project, and it is also used to identify at least two stakeholders per partner country who have to validate the tourism product by answering key questions related to:

i. the commercialization of the tourism product in the specific contexts of the stakeholders involved;
ii. the issue of the conservation of the UNESCO sites;
iii. the implications for mass tourism in the UNESCO destinations;
iv. the relevance of the tourism product for the visitors' experience;
v. to evaluate the opportunities and weaknesses of the FAMOUS thematic product.

In conjunction with the survey for the stakeholders the research also focuses a detailed and practical description of the thematic product to be developed, as part of the work packages for example WP.2 "Famous Dashboard". The other work packages include the project management and quality assurance (WP1); the development of Smart Movie Tourism Product (WP3); the identification of smart technologies (WP4); the setting of Famous Labs (WP5); and the Project dissemination and exploitation (WP6).

4 Best Practices in Screen Tourism. The Case Study of FAMOUS Project

The project, which has been awarded within the COSME Programme by EASME in 2017, and which lasts 18 months, is led by a varied public-private network made up of managing authorities of UNESCO sites (Palazzo Ducale Fondazione per la Cultura, IT), public institutions (Regione Liguria, IT), research and training providers (Institute for Tourism, Travel and Culture, MT), CCI-based SMEs (Inmedia, ES) and tourism SMEs (TOP KINISIS, CY—Tour Operator, and Destination Makers, IT—Destination Management Organization), Chamber of Commerce (CCI Lyon, FR) and NGOs (Hellenic National Commission for UNESCO, GR).

The Main Project Objectives Are

- To innovate and diversify cultural tourism to European destinations by developing a newly designed European product of smart movie tourism that is expected to challenge seasonality and attract tourists from across the world.

The emergence of these two key factors—a (1) UNESCO site hosting a (2) movie—will be managed to create itineraries and experiences of cultural tourism across Europe, primarily towards less-known UNESCO sites and destinations (FAMOUS Smart Movie Tourism Product).

The product is targeted to people travelling for culture (1 out 4 Europeans—EUROSTAT, 2016) and, among these, those motivated to visits destination because of movies and film festivals. Specific segments reasonably include families (with or without children), couples and single, with a focus on Millennials because of their higher tech-savvy attitude (also) when travelling.

- to adopt a product-oriented approach and put the knowledge at the core of the tourism product development, so that all partners moving from an agreed concept of the product they target to build, the effective comprehension of the target groups and reasonably aware of existing practices related to the proposed thematic product (movie tourism/cultural tourism to UNESCO sites).

This approach will help succeed in creating a tourism offer that is deemed relevant to the market, and provided with information that are perceived useful from final users. A well-organized framework (FAMOUS Dashboard) will be arranged to ensure long-term sustainability of the product developed, providing the baseline for speeding up its market uptake (FAMOUS Business Plan);

- to feed this knowledge-based process by using technologies offered by CCIs to cater tourists with a creative and usable transmedia storytelling, making them closer to sustainable approaches to visit and experience EU destinations (FAMOUS SmarTech). At the core of the project there is the willingness to promote, within a destination-making framework (made up of private and public players, training providers and other knowledge producers, associations, organizations and foundations, Chambers of Commerce, NGOs, as well as tourists), a model of product development designed by a network (the consortium and its affiliated entities) in which the place image is linked by a cause-effect relationship with the product developed, and this relationship is triggered and fed by CCIs technologies and contents. The project thus conveys a transmedia storytelling that moves from and nurtures the place image and the whole destination-making at European level. It is assumed that the more appealing the image of the destination, the greater the likelihood of being selected as a destination choice for tourists;
- to improve skills for developing transnational thematic products of smart movie tourism related to cultural heritage and UNESCO sites by offering innovative

training of product management (design, development, promotion and marketing). The main targets are expected to be both public players and private tourism and CCIs operators, including young people (unemployed and jobseekers) (FAMOUS Labs).

The capacity building processes also envisages the creation of a DMCs Network (Destination Management Consulting) at EU level, that should lead to a final agreement to jointly operate for developing and transferring practices of thematic tourism products' development across different European destinations.
The project aims to develop a product which creates a two-fold synergy between tourism and CCIs, which implies:

- the thematic qualification of the product is enabled by a creative industry (audio-visual industry) and exploits the intrinsic cultural value of European film heritage. It recognizes these pieces of work as a significant component of European cultural heritage, as they act as a source of information about our society over times, its history, civilization, as well as the diversity of our cultural identities, people and places;
- the advantage of CCIs-related technology to offer authentic and immersive experiences to UNESCO sites and other tangible and intangible attractions of EU destinations. The product builds a storytelling that is unfolded across different platforms and formats, arranging a creative cumulative story experience that starts from a movie and, through virtual augmented reality and storytelling organized by experienced international travel bloggers, continues with a game play. For the time of their stay, tourists are encouraged to become players of a unique personal movie shot among the treasures and experiences scattered across European destinations.

The product is thought to offer, by the means of digital and CCI-s based tools, including audio-visual contents themselves, a new exploitation window for the European film heritage, poorly managed as strategic asset for the diversification and innovation of European tourism. It challenges the existing lack of a systematic and well-organized approach to the so-called movie-induced tourism, and to the exploitation of spill-overs that the cinematographic industry might better reveal on the image and competitiveness of European places.

It improves knowledge and literacy (a) for tourists, about European destinations and their diverse assets and identities, (b) for SMEs and public actors, and other EU destinations, the project delivers a newly designed model and training offer to address the design and development of a smart product of movie tourism, in which public-private cooperation is managed as a precondition strategic to its success.
The innovation range of the project is embedded into the following elements:

- the project delivers a model as a project output, to approach the development of a European thematic product of movie tourism, which is also another project output, that is expected to be validated by at least two identified stakeholders in each country, and endorsed and adopted from a Network of DMOs at European level;

- the product developed is equipped with a Business Plan, and an Action Plan, both project outputs, intended to foster its market viability and the creation of effective measurable spill-over effects on target groups and destinations involved in the project. Positive impacts, indeed, are systematically measured through the management of a Data Collection System up to 2 years after the project ending;
- by taking advantage of well-experienced SMEs in the development of creative digital solutions for the tourism sector, innovative tech-activities deal with the development of five interactive itineraries, as another project output, that take advantage of augmented reality and embedding of short clips of original movies shot within the UNESCO site/along the itinerary, to raise-awareness and improve knowledge and experience of the cultural heritage close and around movie sets, including film festivals hosted in the destinations. Points of interest across the itineraries developed will be mapped, geo-localized and conveyed by augmented reality through multimedia content (images, videos, 3D rendering). A treasure hunt will lead the guest through UNESCO sites and itineraries, allowing them to interact with the destination by feeling like "in the movie". Spill-overs of cinematographic pieces on the image of destinations will be also ridden by virtual postcards shareable on social networks. They will capture a movie frame, and make the tourist appear as a movie character.

The Technologies at the base of the tool are:

- beacon/geofence/geotagging devices allowing the user to interact with the interest points on itineraries when close to the point. Once there, the app will present a short video narrating a story for the area and its role in the movie;
- QR code providing an energy-saving alternative way to access the same information offered via mobile app, and put in the same points were beacons are placed;
- open web-app platform that will gather the whole itineraries created (and related contents), and will enable to transfer and adopt the FAMOUS practice in further UNESCO sites. This platform will make possible to add new information, sites, itineraries, and will give to the visitor the possibility to search for information about the planned destination.

Creative storytelling materials will be also produced by international travel bloggers with the aim to promote and encourage fulfilling experiences of cultural tourism across destinations. They will strictly cooperate with local players in the creation of stories, so to finally deliver a destination identity that is true and not affected by bias and false perceptions, keeping authenticity at the core of the whole action.

5 Conclusion and Recommendations

Despite the Project only commencing in June 2018 the project demonstrates that the methodology to be implemented is, and can be relevant for other UNESCO Sites and destinations in other countries around the world that plan to arrange filming at destinations and localities within their regions. In turn this will help in assisting destination in developing opportunities to position themselves as potential screen tourism destinations.

However, starting from the feedback provided by the EASME with regard to the initiation of the FAMOUS project there are some further thoughts that perhaps need to be considered. In this context it is recommended to better elaborate on the transnational dimension of the itineraries; to improve their links to UNESCO heritage sites in other European member states beyond the partners countries; to provide a clear analysis of the state of play at the included UNESCO heritage site; to consider also the conditions at other UNESCO sites and the management plans at the sites; and to clarify how many how and which UNESCO sites will benefit from the project's results in the end.

Besides these key factors it is also recommended that further effort is focused on for example: developing a list of potential stakeholders and product components to be included in local Apps/information; providing information on how market uptake can be maintained beyond the project's lifetime; provide information on the creation of a favorable framework of SME's cooperation after the training activities; focusing more on the transferability at EU level in order to increase the relevance for more EU countries and UNESCO sites; generating a positive impact on the UNESCO heritage management authorities; clarifying how the consortium will transfer the practice to other UNESCO sites; and lastly give consideration to more multiplying and spillover effects.

The project is a complex one but aims to deliver a truly innovative niche product that capitalizes on cultural heritage, UNESCO World Heritage sites and the growing interest and phenome of screen tourism activities. The challenge of course is delivering new products that are sensitive and sustainable in the meeting the needs of all stakeholders concerned from visitors, to the place, to the community.

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Chapter 2
Big Data Analytics in Smart Tourism Destinations. A New Tool for Destination Management Organizations?

Tomáš Gajdošík

Abstract In the last years, the amount of data and the possibilities of its analysis have risen rapidly. Leading retail businesses are able to work with complex sources of data, embrace intelligence tools and generate better outcomes. Tourism industry is becoming smarter; however, because of its fragmented nature and small size of tourism businesses, it lags behind the other industries. Today's destination management organizations (DMOs) are struggling with several challenges and have difficulties in adapting to new market conditions. Within the smart tourism concept, the big data analytics is seemed to be a promising tool for overcoming the challenges. Therefore, the aim of the paper is to find out the possibilities of overcoming challenges of today's DMOs based on the analysis of current state and best practices of big data analytics in tourism destinations. The analysis is based on multiple case studies, with the main focus on Central Europe. The paper presents a conceptual view on big data analytics and concludes that the application of big data analytics allows DMOs to better define destination boundaries, understand the needs of today's tourists, effectively manage destination stakeholders and be more competitive and sustainable.

Keywords Big data · Governance · Management · Tourism destination
Smart tourism

JEL Classification C55 · C80 · L83

1 Introduction

Destination management organizations (DMOs) play an important role in the tourism market by stimulating demand and coordinating tourism supply. Today's tourism market is changing rapidly, leading to the fact that perceived value of

T. Gajdošík (✉)
Faculty of Economics, Matej Bel University, Banská Bystrica, Slovakia
e-mail: tomas.gajdosik@umb.sk

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DMOs' traditional activities is in decline (Reinhold et al. 2018). It is mainly due to new competition arising from new players (review sites and internet booking platforms), as well as because of more complex requirements of destination stakeholders and tourists. DMOs now face several challenges that are not able to cope with. These challenges are the result of the new tourists' buying behavior (Huang et al. 2017), when tourists seek for more experience (Xiang and Fesenmaier 2017a) and want to be tourism product co-creators (Buonincontri and Micera 2016).

The first challenge is to define destination boundaries based on the behavioral structure of a tourist, in order to know what to manage (Schegg 2017). Another challenge is to understand the trends and forecast tourist behavior, provide real-time personalized services to tourists and enable product co-creation (Buhalis and Amaranggana 2015). Moreover, today's DMOs, as public-private organizations, are struggling with their competitive positions, as well as efficiency and effectiveness of their actions (Reinhold et al. 2018). From the destination governance point of view, it is important to measure cooperation, knowledge sharing and open innovation among destination stakeholders (Del Chiappa and Baggio 2015). The role of DMOs in ensuring the overall sustainability of destination is also challenged nowadays (Beritelli et al. 2018).

In order to better adapt to new conditions, data-driven approach, based on the application of big data analytics, is becoming a promising way how to capture, analyze and interpret the data on tourists' behavior and stakeholders' needs and thus to overcome the challenges of DMOs. This approach allows destination managers to get more knowledge of their tourists, coordinate better the stakeholders in destinations and to design and develop more personalized product. The conventional practices of product development are nowadays replaced by the new one focusing on more scientific data-driven approach in order to support and enhance tourism experience (Xiang and Fesenmaier 2017a).

The application of big data analytics is crucial for several disciplines. They are the baseline for intelligent transport systems (Xia et al. 2016), smart health (Pramanik et al. 2017), intelligent urban planning (Babar and Arif 2017) and smart city concept (Hashem et al. 2016). In the last years, big data analytics has influence also tourism (Cousin et al. 2017) and the concept of smart tourism have emerged (Gretzel et al. 2015). However, the research on big data analytics within the smart tourism concept is still in its infancy and so far it has been focused mainly on partial themes of big data and its analytics (e.g. social media, mobile data). To the author's knowledge, there is a lack of papers conceptualizing the whole process of big data analytics in smart tourism destinations based on real case studies and the connection of big data analytics with the possibilities to overcome the challenges of DMOs is missing. Therefore the novelty of the paper lies in the conceptualization of big data analytics in DMOs and its application in solving their challenges.

2 Big Data Analytics in the Context of Smart Tourism Destinations

Smart tourism describes the current stage of tourism development influenced by the evolution of information technologies. As Gretzel (2011) points out, the smart tourism is a step in the evolution of information technologies in tourism in that the physical and governance dimensions of tourism are entering the digital playing field and new levels of intelligence are achieved. The components of smart tourism include customer (tourist), businesses (stakeholders) and destinations. The customer level is focused on providing intelligent support based on real-time and comprehensive understanding of tourist experience, while the business level is built on the access to shared data fostering cooperation and resource sharing among tourism businesses (Xiang and Fesenmaier 2017b). The destination level accompanies these two levels by increasing the competitiveness and enhancing quality of life of all stakeholders, including residents and tourists (Boes et al. 2016).

The idea of smart tourism destination is derived from the concept of smart city, where smartness is incorporated in mobility, living, people, governance, economy and environment (Giffinger et al. 2007). A smart city can be defined as a city that is supported by a pervasive presence and massive use of advanced information technologies, which, in connection with various urban systems and domains enables the city to control available resources safely, sustainably and efficiently in order to improve economic and societal outcomes (Bibri and Krogstie 2017). Smart cities are knowledge centers that manage information, technology and innovation, trying to reach efficient management, sustainable development and a better quality of life for residents (Caragliu et al. 2011). Since the inception in the urban environment, the smart approach has been applied also to tourism destinations (Ivars-Baidal et al. 2017). Implementing the smart concept in a tourism destination has been crucial since the connected, better informed and engaged tourist is dynamically interacting with the destination leading to the need of co-creating tourism product and adding value for all tourism stakeholders (Neuhofer et al. 2012).

Smart tourism destinations are based on information technologies that are applicable for their management and for co-creation of tourism experiences. From the tourist point of view, information technologies should enhance experience by giving all the related real-time information about the destination and its services in the planning phase, enhance access to real-time information to assist tourists in exploring the destination during the trip and prolong the engagement to relive the experience by providing the descent feedback after the trip (Buhalis and Amaranggana 2015). From the management point of view, information technologies should allow destination management organizations and stakeholders to decide and act on the basis of data collected and processed (Fuchs et al. 2014). Stakeholders should be dynamically connected through smart technology and create new service offerings (Gretzel et al. 2015).

Big data has become a key component of the information technologies infrastructure in smart destinations leading to more sophisticated decisions. Unlike the traditional data, big data refers to large growing datasets that include heterogeneous formats and has a complex nature that requires powerful technologies and advanced algorithms (Oussous et al. 2017). Traditional analytic systems are not suitable for handling big data (Bibri and Krogstie 2017).

From the technological point of view, big data is often characterized by 3 Vs: volume (large volume generated continuously from many of devices and applications), velocity (fast way of data generation and necessity to be proceed rapidly) and variety (various sources of data in multiple formats) (Furht and Villanustre 2016). The managerial point of view adds another 3Vs: veracity (accuracy of the data meaningful to the problem being analyzed), variability (constantly changing meaning of the data) and value (possibility to extract useful information) (Gani et al. 2016).

Big data analytics describes the activities involved in the specification, capture, storage, access and analysis of big data datasets to make sense of its content and to exploit its value in decision-making (Gandomi and Haider 2015). It aims to discover novel patterns and business insights that can meaningfully and often in real-time, complement traditional approaches of research (Xiang and Fesenmaier 2017a).

Destination managers need to know the details of specific locations visited by tourists, what attracts them at each location, personal reflections on tourists' experiences and future travel behavioral intentions. Traditional approaches of information gathering in tourism destination management have previously relied heavily on surveys and questionnaires. This approach is time consuming and ineffective, therefore the use of big data is welcomed (Miah et al. 2017).

Big data analytics in smart tourism destinations comprises of extracting useful knowledge from large masses of data for enhanced decision making. As Vecchio et al. (2017) stress, through the use of specific and sophisticated data mining techniques and analytics in smart tourism destinations, it is possible to provide much better tourism experience, create contextualized offerings based on tourist needs, co-create product and services with tourists, thus providing better value to them in real time and strengthening destination competitiveness. The aim of using big data in a destination management is to create an authentic emotional connection between tourists and stakeholders in order to improve customer service and support (Song and Liu 2017). Moreover, the key goal is to be proactive, not just to provide integrated service. DMOs need to anticipate tourists' needs and prevent problems.

3 Methodology

The aim of the paper is to find out the possibilities of overcoming challenges of today's DMOs based on the analysis of current state and best practices of big data analytics in tourism destinations. The paper adopts an exploratory multiple case study methodology. This kind of methodology uses case studies to monitor contemporary events and behavior. It employs different explorative approaches and tools for big data retrieval and analysis (Vecchio et al. 2017).

The paper uses primary and secondary data. The source of primary data was a structured questionnaire aimed at the identification of buying behavior of tourists from Central Europe. The research sample consist of 5,975 respondents from Slovakia. The research sample is representative, taking into account the age of the respondents. In order to find out attitudes of destination stakeholders towards data sharing, a survey among 230 tourism businesses in Slovakia and Switzerland was made. Moreover, projects and initiatives in selected tourism destinations are used as best practices.

The application of big data analytics and recommendations for overcoming the challenges of DMOs is done on the destination High Tatras. This destination is a mountain destination, located in the Carpathian Mountains, in Slovakia. According to destination life cycle, this destination is mature and nowadays it is entering the rejuvenation phase. Therefore, it is a good example to show the possibilities of big data analytics. The application of network analysis and mobile positioning analysis is performed.

4 Current State and Best Practices of Big Data Analytics in Tourism Destinations

Big data analytics represent a data-driven management of tourism destination, transforming the processes in today's DMOs. As DMOs were traditionally focused on marketing the destination to tourists and managing the stakeholders, with the use of big data analytics, they can become centers of excellence as well as innovation leaders in tourism. This part analyses the current state and best practices of data collection, exchange, analysis and visualization in selected tourism destinations.

4.1 Big Data Collection

At each stage of tourist journey, from the searching phase, through booking, on-site services use, till the post-trip experiences sharing, large volume of data is created. The data are of personal, behavioral or geographic character and are collected by several means. In order to understand the data collection a survey was done among Central European tourists to find the significance of using the different forms of media during the journey (buying behavior stages) (Fig. 1).

During the searching and booking phase, the most significant are search engines (e.g. Google), word of mouth marketing, hotel website, internet distribution systems (IDS, e.g. booking.com) and online travel agencies (OTA, e.g. Expedia). Moreover, tourists are also searching for information on social networks (e.g. Facebook), in

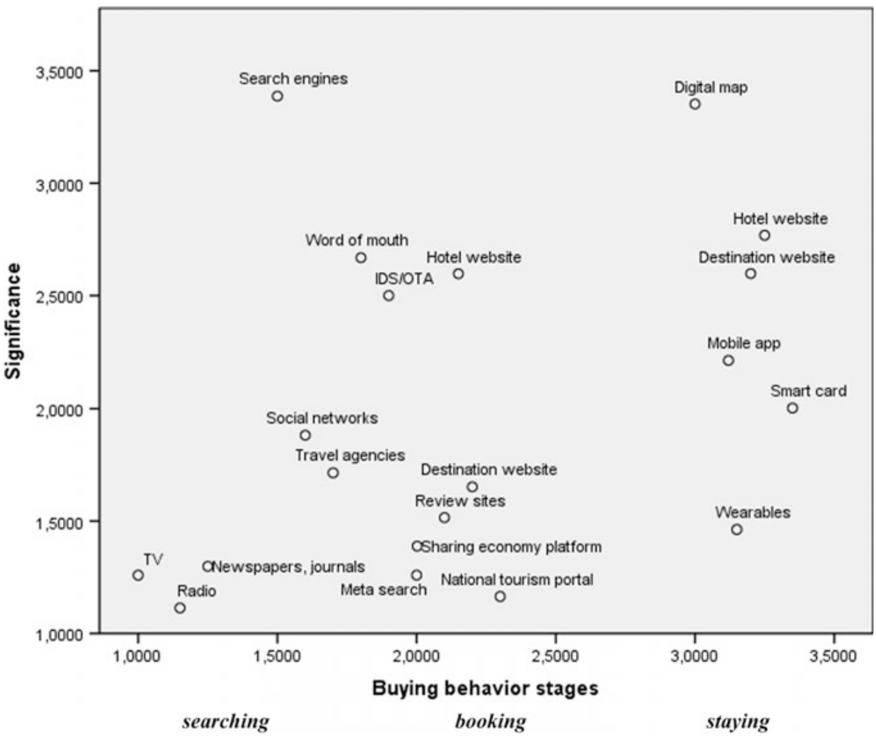


Fig. 1 Significance of different types of media during the tourists' journey

travel agencies, on destinations' web and review sites (e.g. TripAdvisor). In the last years the significance of sharing economy platforms (e.g. AirBnB) and meta search engines (e.g. Trivago) has been rising steadily.

During the stay in the destination tourists uses digital maps to find directions within the destination. Hotels' and destinations' web sites provide important information on services, while the mobile apps integrate all the above mentioned services. Tourists also use smart destination cards which integrate free services (e.g. transport) or provide discount for services in a destination. As a result of technology shrinking, wearables (e.g. smart watches or glasses) started to be used by technology-aware tourists.

Based on the research on significance of different types of media during the tourist journey the most important sources of big data can be identified. The sources of big data include web and social media, sensors, mobile devices, wearables and cards.

Web and social media play an important role mainly in searching and booking phase. Search engines and IDS/OTA provide valuable data on tourist search behavior and booking. The data can include the most used key words and information on tourists' booking trends (e.g. booking ID, booked services in destinations). Moreover, valuable information are provided by social media. Instead of tourists' demographic and psychographic characteristics (age, gender, preferences), social media provide large amount of unstructured data from reviews and comments. These data include text reviews or geotagged material (photos, videos, check-ins).

Destinations' and hotels' websites are generators of more specific data. These can include IP address, bounce rate, page time view, reservation ID and many others. Along with these web sites, also external web sites can be valuable sources of big data. As tourism heavily depends on weather, data collection from weather portals is also important for DMOs. Moreover, information about destination's competitors published on the web are also valuable for the activities of DMOs.

In order to acquire such information web scrapping and web crawling are used. These methods of online data collection allow direct access to raw data from web and social media sites. Web scrapping technology recognizes different type of data on the web page and saves only specified data, while web crawling identifies other pages which should be scraped and thus build a large collection of data from web.

Austria national tourist office is a good example of the use of these data collection methods supported by Weblyzard® technology aimed at identifying online content and measuring brand reputation based on web and social media content.

In addition to web and social media, useful sources of big data on tourists' behavior are *sensors* embedded throughout destination environment. The sensors installed in tourism destinations include sensors to monitor traffic, energy, air quality or sensors for density of crowds (Table 1).

These sensors can monitor tourists' behavior during the stay in destination, as well as the whole environment of destination using cameras, scanners, infrared ports, radio frequency identifications (RFID), near field communication (NFC), WiFi hotspots, Bluetooth low energy (BLE) beacons, satellite technologies and other sensing technologies.

Persons are tracked using cameras and scanners, while *mobile devices* are tracked by sensing technologies (e.g. GPS, Bluetooth), or by GSM network. The

Table 1 Sensors embedded throughout destination environment in selected tourism destinations

Destination	Example sensors
Barcelona	– Sensors to monitor traffic – Smart streetlight sensors – Air quality monitoring sensors
Amsterdam	– Sensors for density of crowds – Identification and traceability sensors based on BLE (beacons)
Helsinki	– Sensors for energy monitoring
Singapore	– Sensors and cameras for cleanliness, – Sensors for density of crowds – Sensors to monitor traffic
Salzburg	– Traffic sensors – Energy monitoring sensors

sensing technologies are enabled by destination apps and allows real-time location or mobility traces, as well as context aware surveys. The data can be collected along with user ID and timestamp and saved into app, which can be access by the app developer.

Tracking mobile devices using GSM networks is known as mobile positioning. The positioning data can be tracked actively, using tracking system, or passively, when the data are stored in the databases of mobile network operators. For destinations, the passive way is more acceptable as the data are stored each time a person uses actively the mobile phone (call, messaging, using the mobile internet). The indicators include number of unique tourists, number of visits in a given destination, exact number of night spent in a destination. Data can be classified by country of origin, according to time (day, week, month) or space (GPS coordinates), duration of the stay (same-day visitors, overnight stays), destination (primary destination, secondary destination, transit) etc. However because of the privacy, the processing has to guarantee anonymity when the visitor cannot be directly or indirectly identified.

The examples of passive mobile positioning in Europe come from different countries. The most experienced country is Estonia, where several measurements have been done to access its destinations' competitiveness. Moreover in the Czech republic destinations such as Prague or Pilsen used this kind of data collection. The recent data collection in Central Europe was made in Slovakia in order to monitor foreign tourists in destinations.

Tracking *wearable devices* is another way of collecting big data. While smart watches offer similar data as mobile devices, smart glasses can provide video files of tourist attractions that are really spotted by tourists.

Tracking the *cards* is also useful to obtain big data on tourist behavior. Destinations use tracking of bank cards or destination smart cards. If tracking the bank card, data are stored in a bank each time a customer uses the point of sale (POS) terminal or ATM extraction with a payment card. The biggest advantage is that POS and ATM are geolocalized. The consumption can be also classified according to country of residence of the visitor, the holiday place, consumed services or other visitor characteristics. However, similar privacy regulations have to be used as in dealing with mobile positioning data.

Destinations also issue their own smart cards. These cards motivate tourists to consume services in tourism destination and they are tools for data collection. Besides the data on the number of issued cards, the data include number of overnight stays, personal visitor data and geolocalized data. In the data collection from smart cards, Slovakia can be seen as a good practice. On the national level a tourist smart card is being issued along the cooperation with MasterCard, combining the bank card and destination smart card.

The overall list of data collection sources, together with the data characteristics is presented in Fig. 2.

Fig. 2 Sources of big data collection and data characteristics

4.2 Big Data Exchange, Analysis and Visualization

As the sources of data collection vary, the owners of the data are also different. Google, a giant search engine in Europe, collects its own dynamic data on internet searches, IDS/OTA providers have its own booking and searching databases, mobile operators store its own location data and also destination stakeholders (e.g. hotels) uses their own eCRM databases. Moreover, the sensors embedded in destinations environment have many times their own owners (e.g. retail shops, police). Therefore the data exchange is needed. In order to exchange data in tourism destinations, all stakeholders should be dynamically liked through the technological platform supporting open data initiative. The data should be shared in real time using application programming interface (API) and allowing timely decisions.

However, there are only few tourism destinations supporting real-time exchange and open data initiative. In general, the willingness of destination stakeholders to share data is very low. According to the research made among Slovak and Swiss destination stakeholders, the majority feels the lack of confidence, the fear of the misusing the data and overall unwillingness to cooperate (Fig. 3).

Nevertheless, there are also best examples of destinations using dynamic exchange of data. They can be found in Swiss canton Valais where the project Valais Tourism Observatory is running, or in Swedish destination Åre, where destination management information system is based on business intelligence technologies.

The exchanged data should be aggregated and fused before transferring to data processing platforms. There are many data processing platforms for big data storage, process and analysis. The most used are Hadoop, MapReduce or RapidMiner. These systems allow performing various analytical techniques and algorithms useful for big data analytics. These techniques may include data mining focusing on discovering new knowledge and patterns in big data, using clustering or regression.

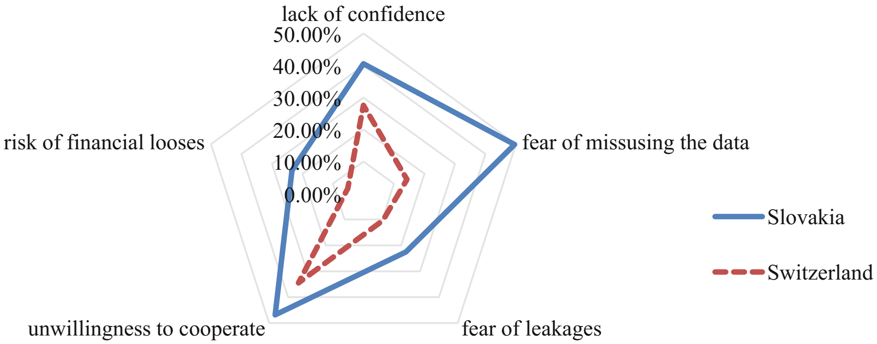


Fig. 3 Barriers of data sharing in Slovak and Swiss destinations

Useful methods are also based on artificial intelligence and may include classification, neural networks or machine learning, where supervised learning uses training data to develop an algorithm for classifying new examples, or unsupervised learning using unlabeled input data to explore and discover hidden patterns.

As a number of tourist reviews have been increasing in the last years, the manual analysis is not very feasible. Therefore the use of text mining and sentiment analysis has been rising. The textual data from social media can be analyzed to find out the emotions, opinions and attitudes of tourists.

Another useful technique is network analysis, which analyzes the stakeholders and their relations in a destination. The relations can include cooperative behavior, dependency, data sharing, etc. Most importantly, in the big data context, the use of network data generated and stored electronically is welcomed.

In order to make timeless decisions based on big data analysis, the visualization of findings is important. Big data analytics provides interactive dashboards for managers of DMOs and all destination stakeholders leading to the real-time decisions. These dashboards enable more effective and efficient decision making process.

The analysis of the current state and best practices in big data analytics have shown that so far, only a few tourism destinations have adopted the intelligent view on the destination. The majority of DMOs relies on traditional approaches. However, as tourism is an information intense industry, DMOs are slowly changing and adapting to the new conditions. Tourists are more demanding, more informed, technology savvy and critical thinking. Destination stakeholders request more outcomes from DMOs' activities. Therefore, DMOs need new tools to strengthen their strategies by better serving today's tourists and stakeholders. Big data analytics can play a crucial role in overcoming the challenges of DMOs.

5 The Use of Big Data Analytics to Overcome the Challenges of DMOs

As identified in the introduction, today's DMOs need to struggle with the redefinition of destination's boundaries; inability to forecast demand and provision of real time personalized services. The effectiveness of DMOs' marketing activities and their competitive position is also questioned. The proper destination governance needs the measurement of knowledge sharing among stakeholders. Moreover, DMOs need to ensure the overall sustainability of destination resources. In this part we propose the possibilities of using big data analytics to overcome these challenges.

5.1 Defining Destination Boundaries

Tourism destinations are many times defined by political borders such as municipalities or districts, not as the spaces where destination stakeholders operate or where tourists seek their experience (Beritelli et al. 2007). This static view on tourism destinations causes several problems. Destination stakeholders are not able to recognize tourists' motives and together with DMO are not able to create the right destination product. Tourists, on the other hand, are confused by the DMO's offer, and are not able to find comprehensive information on demanded services in one place.

Therefore, it is important to redefine destinations boundaries based on tourist flows. Each destination has multiple tourist flows occurring at different paces and different places. Among these aforementioned flows there are those that are stable, recurring and well-catered to the supply side. They are known as strategic visitor flows (Baggio and Scaglione 2018). In order to find strategic visitor flows, the big data analytics based on geotagged data is welcomed. These data include check-ins and media upload via social media, mobile tracking data and data from smart cards. Such data can provide complementary information on tourist intra destination movement, the spaces of consumptions, as well as the most important attractions visited. Based on the information, the boundaries of destination can be extended or limited, based on real demand requirements.

Figure 4 describes the model situation in the High Tatras, where strategic visitor flows were identified based on Flickr geotagged photos, passive mobile positioning system and destination smart card usage. Based on the analysis of these information, new destination boundaries were proposed. So far the area has been divided into two destinations and managed by two DMOs (Region High Tatras, High Taras – Foothills). The new proposed destination has the ability to better fulfill the requirements of tourists and thus can be more competitive in tourism market.

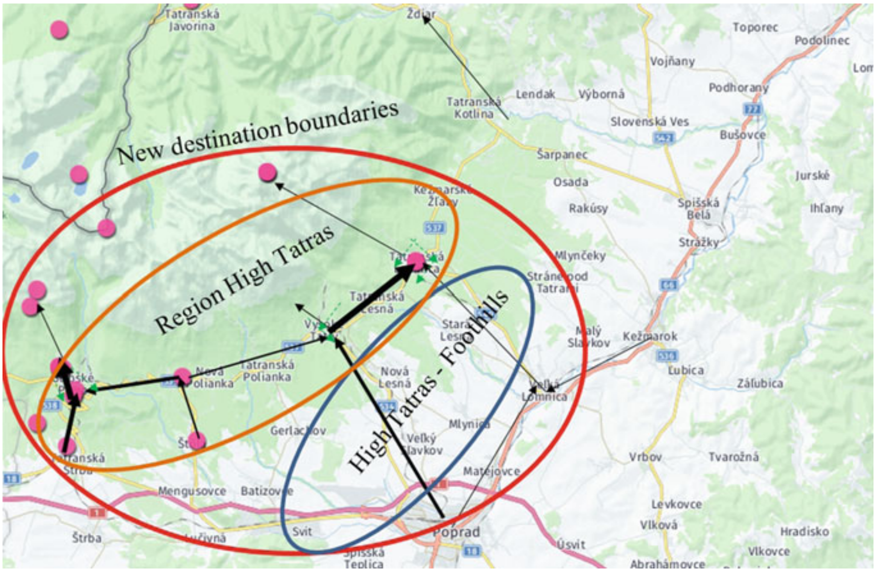


Fig. 4 Destination boundaries definition based on geotagged data in the High Tatras

5.2 *Destination Demand Forecasting and Product Personalization*

Traditional DMOs' strategic decisions relied mainly on static and ad hoc data. Surveys and traditional statistics based on accommodation facilities do not provide enough information for exact and real time forecasting. These data were published retrospectively, not allowing DMOs to look into future. Big data analytics allows DMOs to understand today's tourists and predict their behavior. It enables DMOs to look into future and anticipate the needs of tourists.

Based on the web searches and bookings it is possible to predict tourist demand and track the declining or growing market segment. For example, data from reservation platforms (IDS/OTA) can provide valuable information on number and characteristic features of travelers based on their searches and bookings in the destination. Moreover, based on data from social media, DMOs can identify real-time trends of how potential, current or past visitors feel about the destination (Fig. 5).

The combination of search data, booking data and third party data from weather portals, allows DMOs to predict the future more precisely.

Today's tourists do not want to be passive product consumers; they seek for the co-creation and personalized services. Big data analytics allows to push the classic electronic customer relationship management into new levels. Real time personal, behavioral and geographic information on each tourist can lead to high personalized offerings and strengthening customer the loyalty. DMOs can benefit from

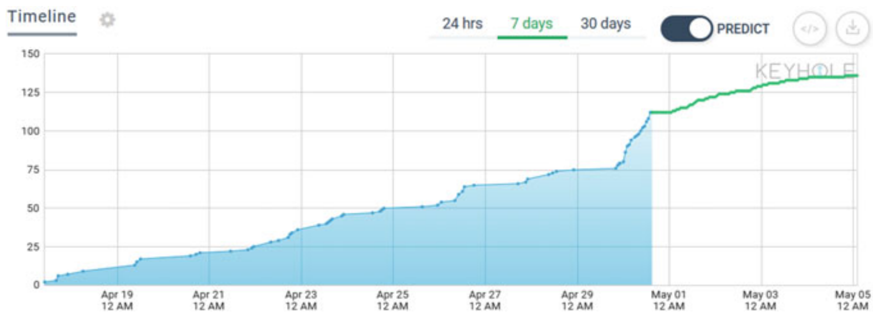


Fig. 5 Trend identification based on social media analytics in keyhole

"anticipatory product customization". Based on the available knowledge on tourist, it is also possible to anticipate which services will tourist want to book. Therefore, DMO can pre-create the tailor-made product to the right customer.

5.3 Ensuring DMO's Marketing Effectiveness and Competitive Position

After understanding today's tourists and their behavior, DMOs can built effective and innovative marketing campaigns. In order to market the right product to right customer, target advertising and recommender systems can be used. The target advertising is based on cookies and ensures that the marketing campaign will be displayed only for those who are interested in travelling nearby the destination, as they searched specified key words. The recommender system is based on previous searches, bookings and consumption. Using the collaborative filtering, the obtained data on a tourist can be compared with the database of services which other tourists liked, booked or bought and suitable recommendations for further purchases can be made.

In order find out, whether the marketing campaign was successful, in the past, DMOs had to wait until tourists arrived at the destination. With the help of big data analytics, DMOs have real time information on searches and bookings or social media activity (Fig. 6) and the impact of a marketing campaign, even as it is in progress, can be measured (Amadeus 2017). Afterwards appropriate steps could be made to ensure the effectiveness of the campaign, such as retargeting to other segments of retiming its publication.

For effective marketing, understanding the competition is also crucial. Big data analytics helps to identify the competitors and find out the competitive advantage in order to attract more tourists. As the competition in the tourism market is becoming tougher, it is important to stand out. DMOs can use big data analytics to identify which destinations are searched by tourists for similar days. It can lead to

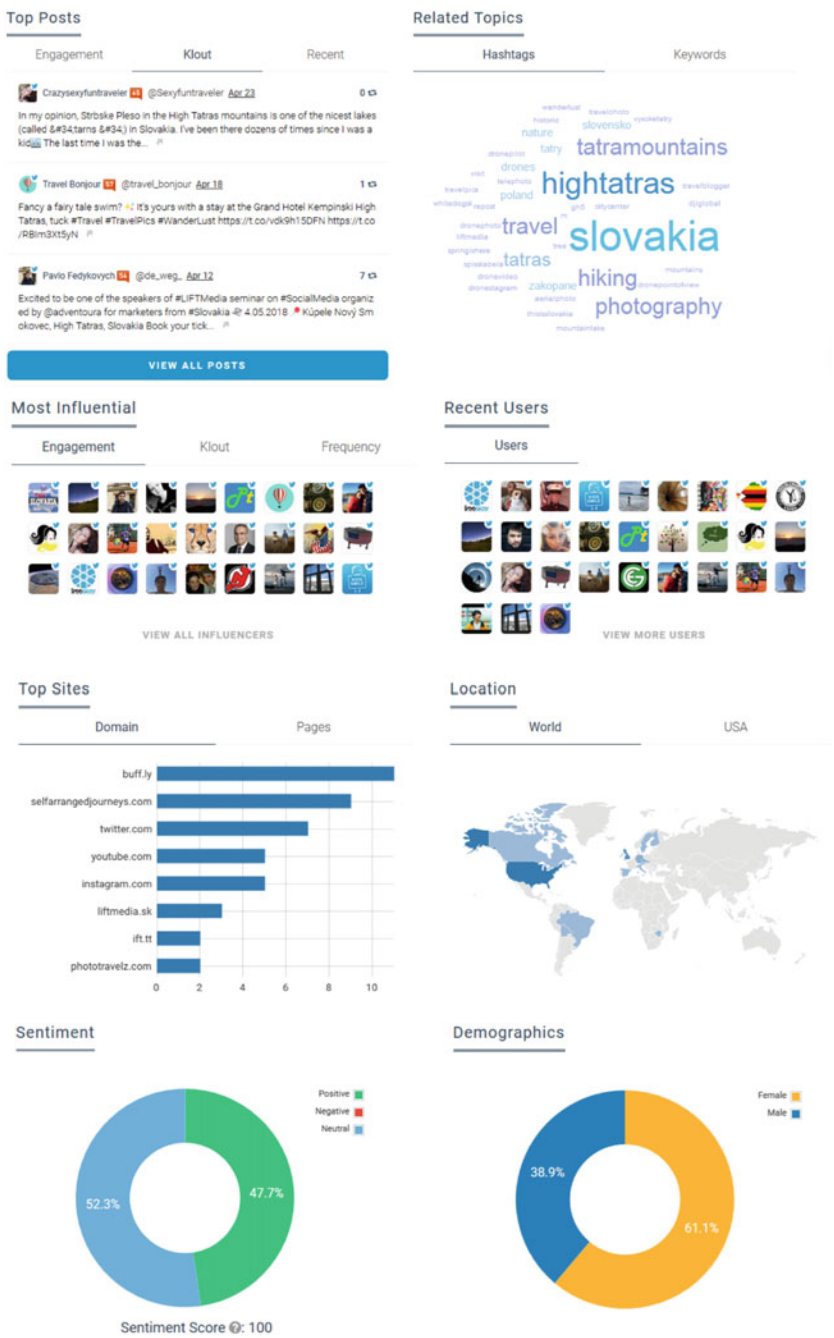


Fig. 6 Dashboard of social media data analytics based on keyword "High Tatras"

identifying new market competitors, many times different from the expected ones. The real time analytics allows to change the strategies immediately, without losing valuable time.

5.4 Destination Governance Strengthening and Knowledge Sharing

Due to the changing conditions in the tourism market, the need for flexibility and dynamics in co-ordination of tourism destinations, the concept of destination governance has evolved. It highlights the bottom-up approach, multi-actor complexity, resource dependencies and cooperation within tourism destination. It can be also stated that knowledge sharing determines the competitiveness of a destination and is a vital part of destination governance.

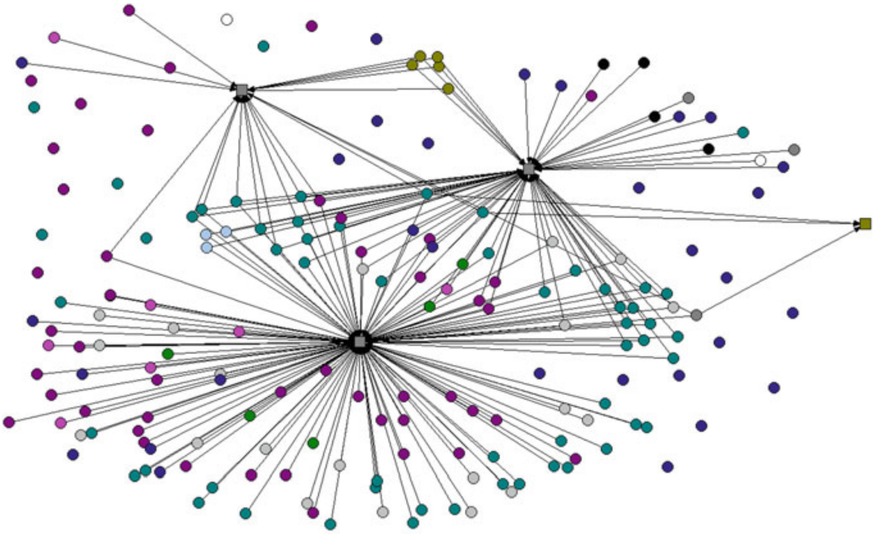
One of the possible ways how to measure knowledge sharing is the network analysis. However, the data for networks analysis is hard to obtain by traditional techniques used by DMOs. Therefore, big data analytics provide new horizon for obtaining and measuring the data. The open data initiative and the use of intelligent information systems in tourism destinations allow the measurement of exchanged data. This information can be processed by network analysis, in order to find how connected the stakeholders are and how the information and knowledge is spread.

An example of such analysis was performed in the High Tatras and the quantitative characteristics of local efficiency were calculated. Based on these characteristics top stakeholders with the highest levels of knowledge sharing can be identified (Fig. 7).

5.5 Ensuring Destination Sustainability

Destination’s sustainability takes into account economic, social and environmental pillars. So far, DMOs have not been able to gather, monitor and analyze all the sustainability indicators in real time, which cause that many times the managerial decisions came too late. Big data analytics allows the data to be captured more easily (Table 2) and the real-time processing and visualization allow effective and timely decisions.

Managers do not need to wait months or years to find out that the carrying capacities of the destinations were exceeded, however the warning system based on bid data analytics can provide alerts and recommendations to ensure destination sustainability.



	1 EffSize	2 Efficie	3 Constra	4 Hierarc
OOCR Region VT	66.681	0.966	0.148	0.761
TMR	18.048	0.902	0.180	0.532
Aquacity	1.800	0.450	0.459	0.204
ZCR VT	132.067	0.993	0.043	0.730
OHDZ Strbske Pleso	1.000	0.500	0.564	0.003
OHDZ Stary Smokovec	1.000	0.500	0.564	0.003
OHDZ Tatransk◆ Lomnica	1.000	0.500	0.564	0.003
Aqua Ski Bus	1.000	1.000	1.000	1.000
Tatranske Elektricke Zeleznice	1.000	1.000	1.000	1.000
Hotel Acad◆mia	1.000	1.000	1.000	1.000
Hotel Ban◆k	1.000	1.000	1.000	1.000
Hotel Bellevue	1.000	0.500	0.522	0.000
Hotel FIS	1.667	0.556	0.372	0.002
Hotel Forton	1.000	0.500	0.522	0.000

Fig. 7 Knowledge sharing visualization and measurement in the High Tatras

Table 2 The recommendation for the use of big data collection to monitor sustainability in the High Tatras

Sustainable pillar	Indicator	Means of collection
Economic	Number of tourists	Mobile positioning, smart cards, scanners
	Tourists' spending	Bank cards
	Rise of prices	External web sites
Social	Criminality	Cameras
	Attitudes of residents	Social media
	Satisfaction of tourists	Social media
Environmental	Air cleanliness	Air sensors
	Transport situation	Traffic sensors, cameras
	Geographic dispersion of tourists	Smart cards, BLE, mobile position
	Landscape look	Wearables

6 Conclusion

Big data analytics represents a new tool for destination management organizations. It uses real time data and allows real time decisions. Comparing with traditional approaches, it does not rely only on past static data, but it uses dynamic data and intelligence tools, in order to be more proactive, rather than reactive. DMOs need to adapt very fast to changing environment, as more and more businesses operating in the market are adopting smart approach and business intelligence. The application of big data analytics allows DMOs to define what to manage, better understand the needs of tourists during all phases of tourist journey, better manage tourism stakeholders, become more effective, competitive and sustainable.

As the paper presents the conceptual view on big data analytics, it does not take into account the difficulties in the whole process. These can include mainly lack of knowledge, employees, money and time. It can be the reason why only a few destinations have adopted the smart approach so far. Nevertheless, we hope that soon more DMOs will find their way to big data analytics and strengthen the smart tourism approach.

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Chapter 3
Educating of Entrepreneurship Competence in Pre-university Education System: An Effective Way for Tourism Development and Innovation

Robert Gjedia and Valentina Ndou

Abstract The objective of this paper is to present the results of a desk and field explorative analysis aimed to provide insights and models for realizing entrepreneurial skills curriculum in all cycles of a pre-university education system, and also in higher education schools in a developing country context, such as Albania. In doing this, the authors focus on comparing a US model of content entrepreneurship with entrepreneurial competence in the official curriculum of Albanian Education. In this sense, this paper is a support to the development of entrepreneurship competence and tourism development, as an integrated way in the implemented curriculum, especially for the pupils of pre-university education in Albania.

Keywords Entrepreneurship · Tourism · Curricular content · Intercourse of curricular areas

1 Introduction

Entrepreneurial orientation is regarded is increasingly recognized as a critical innovation process that contributes to economic growth and well-being of society thanks to their contribution related to jobs creation, to speeding up structural changes in the economy as well as to contribute indirectly to productivity through the introduction of new competition. This has been associated with a growing number of universities and colleges throughout the world providing entrepreneurship education (Kuratko 2005).

Preparing the right skills and capabilities to next entrepreneurs it is necessary to conceive entrepreneurial ability as a form of human capital with specific and

R. Gjedia (✉)
Department of Social and Educational Sciences, University "Marlin Barleti", Tirana, Albania
e-mail: robgjed@yahoo.com

V. Ndou
Department of Innovation Engineering, University of Salento, Lecce, Italy

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innovative mindsets, behaviours, competencies, skills and capabilities (Schultz 1982). Extant literature shows how in creating such human capital capabilities, the higher education sector has a crucial role to play as incubators of knowledgeable individuals which could bring novel ideas for development (Venkataraman 2004) as well as to develop an innovative entrepreneurial mindset. In fact, it is worthy to note as proliferation of entrepreneurship programs in year; they have increased from 300 offered by 1980s up to over 1600 universities 2000 (Kuratko 2005). Their role and contribution is highly demonstrated with the high level of innovation and entrepreneurship that had flourished around Silicon Valley and some regions in the USA and other parts of the world with extraordinary universities at their core (Venkataraman 2004).

Creating entrepreneurial mindset among the members of society (public sector, private sectors, academia etc.) can be seen as a central mean for organizations and individuals to cope with uncertainty and complexity but also as the mechanism for them to create and thrive upon it (Gibb 2005). This scenario translates into a need to equip individuals with personal entrepreneurial capacities but also with the capability to design organizations of all kinds, public, private and NGO, to support effective entrepreneurial behaviour (Gibb 2005). In this scenario universities are called to play an instrumental role for promoting technological change and innovation (Bramwell and Wolfe 2008) as well as for creating favourable environments for entrepreneurship in all its levels (Kirby 2005).

In this paper, authors undertake a desk and field research comprising the review of Western curriculum documents, analysis of entrepreneurship curriculum content in Albania education system, focus groups meetings with teachers and students of profiles related to tourism, such as: geographers, historians, biologists, specialists of the environment, tourism and sports etc. Such analysis allows us to come up with concrete proposals for further improvement of the elements of the entrepreneur's curriculum, such as: knowledge, skills, values and attitudes necessary for supporting of tourism development in rural and urban areas, as well as the development of cultural tourism at the local and national level in Albania.

Integrating or combining component elements of entrepreneurial competence with curricular fields related with tourism will enable a proper and effective formation of children from the young age. The links, that the authors of the article propose and suggest, between the entrepreneurial competency and the right formation to develop tourism, are a path that makes the pupil with a necessary and valuable ability for personal future and for living in democracy.

2 What Is the Entrepreneurial Competence?

Entrepreneurs are not born, but they become so through their life experiences

Prof. Albert Shapio University of Ohio, USA

The last two decades in many European countries is being discussed very widely about a competence aimed at preparing young people with knowledge, skills and attitudes to entrepreneurship. Skills in this regard are seen as a good opportunity to integrate young people naturally and without difficulty into “real” life, which implies that young people may decide by themselves to build their own lives, take on its lead in an efficacious way, turning it into a developing and profiting process for themselves. These skills set up during school years aim that students create their own businesses, to successfully establish their work in a successful way.

Creating entrepreneurial competences can be seen as a central mean for organizations and individuals to cope with uncertainty and complexity but also as the mechanism for them to create and thrive upon it (Gibb 2005). This scenario translates into a need to equip individuals with personal entrepreneurial capacities but also with the capability to design organizations that support effective entrepreneurial behaviour (Gibb 2005). In this scenario education system is called to play an instrumental role for creating favourable environments for entrepreneurship in all its levels (Kirby 2005).

Entrepreneurship education is crucial to develop in participants that entrepreneurial behaviour necessary to deal with a series of tough issues, to possess well-developed problem solving skills as well as the ability to learn continuously (Byers et al. 2011). Education cannot be realized only through books, it is accomplished by incorporating into this process the “living” life experiences, through which they learn, try to risk, manage the results of their work, but above all they create from these experiences the skills and indispensable attitudes towards life. Entrepreneurship is a key, comprehensive and important competency that includes within it certain knowledge, skills and attitudes that enable young people to cope with the challenges of the new century we have entered. Entrepreneurship includes a set of knowledge and skills that make up a line of entrepreneurship education, such as:

- *Ability to recognize personal opportunities from each individual;*
- *Ability to utilize its capabilities by generating new ideas and using the necessary resources;*
- *Ability to create, to act, to take a risk by undertaking a new individual “adventure”;*
- *Ability to think in a way that is creative and critical.*

Therefore, in preparing the right skills and capabilities to next entrepreneurs it is necessary to conceive entrepreneurial ability as a form of human capital with specific and innovative mindsets, behaviours, competencies, skills and capabilities (Schultz 1982).

The benefits of “entrepreneurship” education include all ages that are taught in the pre-university system. They need to have all necessary conditions to acquire knowledge in this area in all school subjects, thus orienting a new education policy, which naturally requires a professional reflection in the education curriculum. Certainly, the earlier and more widespread the exposure to entrepreneurship and innovation, the more likely students will become entrepreneurial, in one form or another, at some stage in their lives (Volkmann et al. 2009).

What is entrepreneurship as a competence to be acquired and met by young people at school?

Different studies and researches has focused their endeavours in understanding and setting out the set of skills and capabilities that are essential for creating entrepreneurs.

The entrepreneurial traits consist on specific behaviours, attitudes, skills, values and competencies. The Table 1 provides a synthesis of these issues (NESTA 2008).

Creating and delivering such traits and capabilities requires new learning and teaching approach that goes beyond the traditional education and teaching styles that are characterized by critical analysis, passive understanding, absolute detachment, written communication and neutrality Gibb (1987).

Table 1 Entrepreneurial skills, values and competencies

Entrepreneurial behaviour, attitude and skill development	Entrepreneurial values	Entrepreneurship competencies
• Opportunity seeking • Initiative taking • Ownership of a development • Commitment to see things through • Personal locus of control (autonomy) • Intuitive decision making with limited information • Networking capacity • Strategic thinking • Negotiation capacity • Selling/persuasive capacity • Achievement orientation • Incremental risk taking	• Strong sense of independence • Distrust of bureaucracy and its values • Self made/self belief • Strong sense of ownership • Belief that rewards come with own effort • Hard work brings its rewards • Belief that can make things happen • Strong action orientation • Belief in informal arrangements • Strong belief in the value of know-who and trust • Strong belief in freedom to take action • Belief in the individual and community not the state	To what degree does the programme build the capacity to: • Find an idea • Appraise an idea • See problems as opportunities • Identify the key people to be influenced in any development • Build the know-who • Learn from relationships • Assess business development needs • Know where to look for answers • Improve emotional self awareness, manage and read emotions and handle relationships • Constantly see yourself and the business through the eyes of stakeholders and particularly customers

2.1 Why Education of "Entrepreneurship"?

Entrepreneurship is the key direction of any market economy[1] in a country where the rule of free competition and realistic assessment of the human, economic, social and political values is real. Creation of multiple jobs in a society has always begun by small businesses which are created by individual entrepreneurs, many of which later turned into big businesses, enabling employment of a more considerable amount of people. Entrepreneurial people feel free in their lives, they have a system of self-esteem for themselves and their work, feeling more secure and happy in life. The result of this is that many politicians, leaders have always had in their initial experiences a free entrepreneurship in economy. Cultivation of an entrepreneurial culture is a great opportunity for young people to believe in these values and to succeed at the local, state and global level, and that is why the primary goal of entrepreneurship education is to prepare successful young adults in a free entrepreneurship economy.

"Entrepreneurship" education is a lifelong learning process, which begins in primary school and advances in all levels of education, including adult education at work. Draft of an official document that presents a clear framework for "entrepreneurship" education should be used by teachers to establish objectives to develop learning activities that aim at enabling young people to challenge the difficulties to solve problems that arise in life, to use personal experiences from life in function of entrepreneurial opportunities, and to create an expertise to think, create and manage a personal business successfully.

Different streams of literature shows the impact of different forms of teaching and learning in the entrepreneurship education (Kolb and Kolb 2005; Rasmussen and Sørheim 2006). In the experiential learning theory, Kolb (1976) argues that learning consists in transforming experiences to knowledge either by reflective observation or by active experimentation. Reflective observation consists in reflecting upon information and consists on lectures, movies, dialogue, cases, readings while active experimentation consists on actively testing new information and ideas in the real world and can include role plays, management simulation, field work and experiments (Kolb 1976; Walter and Dohse 2012).

Although both learning methods are valuable, it is highly argued that entrepreneurs favour active experimentation (Ulrich and Cole 1987), they are generally action oriented and their learning is mainly experience based (Cope 2003).

Parents are very much interested that their children are learning in a good school and they generally are only thinking of stimulating the learning of key subjects such as mother tongue, foreign language and mathematics. Today in Albania as well, a considerable percentage of people live with its own business and thousands of others dream of having a venture, a firm, a company, an office, to live and feel "free" in society. Entrepreneurship as a competency that needs to be achieved by students includes within it a set of knowledge, skills, attitudes and values that are

[1]AKAFP (2009).

reflected in the content that provide all subject curricula by social, scientific, and natural areas. In this context, within an entrepreneur's holistic ability, it is imperative to identify such behaviours such as:

- *Ability to build relationships with others*
- *Ability to maintain a stable relationship*
- *Ability to always be rigorous and "strict" with yourself and with others*
- *Ability to cooperate with others, the constant connection with them, as well as having a personal "discipline" are attitudes that require a long time to be created.*

They are the result of a sound formation in the field of natural sciences, social sciences at school, but more importance is the environment in which a student lives up to high school. Working in a group, building relationships with others, coping with conflicting situations, coping with the social, cultural problems that the group is part of is a good opportunity to create effective co-operation. Researchers suggest that child participation in groups where different social problems appear, where there are problems in relationships, gives students strength and opportunities to create sustainable co-operation skills in life. An important role in this case is the process of teaching and learning.

2.2 How Can "Entrepreneurship" Be Included in the Curriculum?

> Everyone has been an entrepreneur once in his life even without knowing it
>
> *Bill Gates. Microsoft USA*

Creation of entrepreneurial skills is achieved through a long learning process and continues throughout life. Entrepreneurship "education needs to be included in all levels of education and enable a natural integration of the knowledge, skills and attitudes it seeks in a holistic system within the school curriculum. In this context, entrepreneurship cannot be considered as a special school subject or program, but it is developed and fulfilled through a long-term process involving different ages of young individuals until graduation and further into the profession they choose to work. This process involves a long relationship, which should be based on active interaction between teachers, educators and youth, but more important is the stimulation of a learning that is always based on teamwork, coping with situations and problem solving, by fostering and creating a profound reflective and critical thinking that is made based on the examination and analysis of real life events and situations.

A pattern[2] below presents several stages of lifelong entrepreneurship education development.

The first stage: The beginning is related to the formation of students in elementary and high school where students based on their life experience identify facts and elements of business development and performance and market issues as well. At this stage, students learn about the basic elements of economy, about career opportunities, the needs and skills needed to become successful in the free market economy. Motivation to learn in this direction and work to support the individual student opportunities in this period are important results at this stage, which gives them confidence for the future.

The second stage: To be knowledgeable/informed. This stage is related to high school and in this period students learn to speak with business language and watch problems from the market and business point of view. An urgent need at this period is considered technological education related to the use of electronic devices such as computers, internet, technical equipment etc. At this stage, it is strongly emphasized the introduction of special education program for entrepreneurship education or the development of special courses for entrepreneurship. For example, the treatment of concepts and practices such as the use of money in the form of "cash", auctions, sales, purchases should be part of the professional communication in the classroom.

The third stage: Creative Applications/Applications. Business is a complex issue, but the formation and education of young people does not adequately reflect this complexity. Doctors' training is done in many years at university, but in the economic life, a small business can teach all the needed and necessary things only with the training that was provided only on Saturdays through seminars.

At this stage, students should have the right time to explore business issues, different types of business, and how to plan a business. At this level there is a good opportunity to repeat what has been taught at previous levels or phases. At this stage it is necessary for students to have consolidated views on decision-making and planning and business-related issues.

This stage can take place in advanced vocational school programs through special courses or through 2–3 years' studies at universities. The final goal of this phase is to enable students or students to become entrepreneurs.

The fourth stage: Start implementing lifelong entrepreneurial skills. After training in education, by taking a particular profession starts natural experience at work. Many people start to create their own business and at this stage they as beginners in their business need assistance and counselling. Occasionally, at this stage can be used educational programs for the business community, which can be provided by vocational schools, universities, or various projects that are implemented in the field of human capacity building and may have training programs for entrepreneurs.

[2]https://www.theguardian.com/teacher-network/teacher-blog/2013/nov/23/teaching-enterprise-school-curriculum.

The fifth stage: Development and self-sufficiency as entrepreneur. This phase coincides with the time when adults are already establishing their business and managing it well enough.

Very often business owners are only drawn from the idea of profit, but later they realize that it is also important to track the developments and perspectives in the field where they work, not only in the local and national context but also in the global one, which should be coupled with a series of staff and self-training with new experiences and especially technological developments that change from time to time and affect the quality of production and level of goods produced by them. In successful Western experiences the training of business communities, realized by universities, or their organization in associations, in different bodies, participation in trade fairs, or presence in the media through advertisement and presentation is a good opportunity to be always informed, in receiving and sharing ideas that hold an ongoing business, progress and economic results.

3 Tourism Context in Albania

The Albanian geographic environment represents a rich and diverse offer for the development of Albanian tourism.

Albania is located at the most important crossroads of the Western Balkans, linking East with the West meet. Dyrrahu and Apollonia were important coastal towns. The Illyrians knew about Greeks and the Romans civilization through trade and cultural exchanges between with these peoples. High diversity of reliefs conditions the variety of Albanian landscapes; the typical Mediterranean climate also defines the features of the hydrography that also exhibit its wealth.[3] The Albanian environment with all its component elements provides a rich geographic natural offer in support of tourism development. The hilly-mountainous environment creates a variety of forms, enabling the development of many types of white, natural, strolling, climate, health, adventurous tourism. The Albanian Alps show their greatness in some tourist spots where residents offer bio products, such as: Theth, Valbona, Razma,[4] etc. Numerous tourist itineraries through the 2000–2700 m peaks are modeled by glaciers with many circuses, glacial lakes and glaciers and canyons. Mediterranean climate with high solartitude supports seaside, rural, rural tourism. Hydrography consisting of the Adriatic and Ionian seas with a coastline (470 km) supports tourism. Cultural links and trade exchanges were numerous with neighboring peoples, defining the European identity of Albanians. During medieval, despite the Ottoman invasion, they continued trading with west countries and sought to maintain links with European culture. Also the museum towns of Berat, Gjirokastra; the castles of Rozafa (Shkodra), Kruja, Berat, Gjirokastra, etc., many

[3]Academy of Sciences of Albania Physical Geography of Albania (1986).

[4]Doka and Draçi (2009).

museums in major cities such as Tirana, Shkodra, Durrës, Berat, Korça,[5] Vloraetc, are a showcase of Albanian history for local and foreign tourists. Ethnography reveals its wealth through the contrasts of costumes in men's and women's clothing in the provinces of the north (Gegëri) in central and southern Albania (Toskëri). The cultural offer of tourism is also added to the values of culinary and gastronomy. Bio foods are present in every part of the Albanian territory. Albanian cuisine is distinguished for the baked meat of small herds, various salads, raki traditional drink, especially of grapes and plum, etc. An invaluable value of Albanian culture is religious harmony. Albanians live in harmony for centuries, not only Christian and Muslim, but also Orthodox, Catholic, Muslim, and Bektashis. Albanians regardless of religion participate in religious tourism on the itineraries and ceremonies that take place at sacred destinations and places for local residents, such as St. Ndou (Laç), Sari Salltik (Krujë), Mountain of Tomorit, etc. This complex, geographic, natural and cultural offer enables the development of every dimension of multi-year touristic flow.

4 Connection of Entrepreneurial Competence with the Learning of Tourism Field, an Opportunity to Create "Capable Entrepreneurs"

Curriculum Framework of Pre-University Education presents basic competencies that pupils must meet to finalize this cycle of the education system. Parts of them are the competencies of entrepreneurship and studying of curriculum fields related with tourism such as: history, geography, biology, culture, citizenship, arts, sports and foreign languages. If you want to become a successful and successful entrepreneur today, not only in your homeland, but also in global society, it is a necessity and effective support the use of holistic skills that include knowledge's about tourism. From this point of view, identification of topics and knowledge which are organically linked between entrepreneurial skills and the use of holistic knowledge's about tourism that offer subjects of social and natural sciences, languages, arts and sports, is considered a fruitful way to stimulate and motivate the creation of entrepreneurial competence in school. For this, every teacher of curriculum fields in the primary and secondary education in subjects where entrepreneurial and holistic abilities, are described as curricular obligations and should organize the planning and implementation of links between tourism knowledge's and entrepreneurial competence at the first stage, as follows:

1. *Identify learning topics* of entrepreneurial knowledge and skills that can be developed and taught in the different curriculum areas (e.g. tourism, business, ICT use, history, cultural heritage and communication, biology,

[5]Belba (2017).

self-management and coordination, writing, implementing and reporting curricular and cross-curricular projects, etc.)

2. *Use in teaching lessons* that support the learning process of social & natural sciences, languages, arts and sports and creation of entrepreneurial skills through methods, interaction techniques and strategies for teaching and especially for learning so that they stimulate and motivate learners in discussions, debates, groups and teams work, presentation of works, conceptual analysis, case scenarios and continuous feedback. All these ways in these learning processes can be focused on issues of development of tourism in within country and what the children need to understand and implement in these learning situations.
3. *Suggest topics for curricular and cross-curricular projects* to be planned and developed about tourism knowledge's but whose content be necessarily related to creation of entrepreneurial skills (e.g. the topic related to business, personal care, presentation and personal communication of ideas, our heredity, religions in Albania, geography environments, culinary, arts and touristic places with the different viewpoints and arguments related to economic knowledge, with use of money, with the possibility of each pupil be able to manage himself or herself with motivations related to the tourism services profession or qualification they wish to take in this field, etc.)
4. *Use assessment appraisal techniques* for learning and finding students who appreciate learning of tourism knowledge's related to the subjects of entrepreneurial skills formation.
5. *To enable publishing and presentation of pupil's works and projects* in open-air premises for teachers and other pupil's, but also for the community, as a way of generalizing the positive experiences they have experienced, but also to generalize the support for the local tourism and creation of the entrepreneurial necessary competences for this field.

These steps of the first stage suggest to teachers require the support of the school directorate and the subject and curriculum teams, for which we suggest that the formation of entrepreneurial skills and relationships with curriculum areas of the knowledge's of tourism should be part of the priorities of school plans and pupils development. We think that many entrepreneurial skills related to tourism, such as travel guides, information about tourism in the city and village or the creation of skills for services such as: waiter, receptionist, local museum guider, presentations of cultural heritage, local culinary and traditional clothing's, etc., can be formed at school. The school can use its curriculum spaces and freedoms and development of school curriculum, such as: cross-curricular and cross-curricular projects, vocational modules, extracurricular activities, but we believe that the development of integrated curriculum topics, between knowledge of science and curriculum areas with knowledge about tourism is one an effective and motivating way to learn and to create entrepreneurial skills for tourism.

Creating of entrepreneurship skills includes and other skills that are aimed at European competencies in pre-university education curricula such as: thinking competence, digital competence, personal competence or the competence with other people, where the following stages give ideas on how to meet competences of entrepreneurship in the field of tourism.

The second stage, which is that of being knowledgeable, informed, fits well with the entrepreneurial competence of communication and expression about development of tourism in local and country area. *In the third stage*, pupils need to have enough time to explore issues about tourism, such as: heredity, religions in Albania, geography environments, places for beaches and mountain tourism, culinary, arts and sports etc., and their goals and desires in tourism services. *The fourth stage*, the implementation of entrepreneurial skills in real life, is the stage when the learner starts working experience and receives education counselling from the tourism business community, vocational schools, universities, etc. At this stage, the competence of thinking as well as that of life, entrepreneurship and the environment is well suited.

In the fifth stage that of development and self-fulfilment as entrepreneurs fit into all the competences, but especially the personal, civic and digital competences. None of the above stages in question can be fully covered by this or that competence gained through learning about tourism knowledge's. Each competency affects in its own way each of the stages and attention is focused on achieving the fullest and best results.

5 Conclusions

Teacher of primary and secondary education and those of other curricular pre-university education areas may incorporate diverse forms of integration in development of common learning topics, aiming at achievable goals for pupils substantially related to the creation of entrepreneurial skills. By making use of knowledge and skills created by each curriculum area about tourism, pupils are enabled to profitably gain entrepreneurial competence. This is the case where the process of learning and use of the knowledge's of tourism is applied and facilitates, more than any other field of curriculum, implementation of entrepreneurial competency in real life. This process implies serious claims in student's integration in a safe way in local tourism labour market, but naturally this use of the knowledge's of tourism makes it a worthy competitor in the foreign market as well. These pupils become real "owners" of their choices, personal decision-making of their own lives. In this sense school directories, subject and curriculum teams can plan and implement learning activities or develop curricular projects that empower entrepreneurial competence through the use and learning of the knowledge's of tourism in other curricular areas, as well as between cross-curricular topics. There are ways and areas in the curriculum, but also through out-of-school activities or by creating clubs of young entrepreneurs to develop effective activities to fulfil in school the entrepreneurial competence in the field of tourism.

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Chapter 4
Entrepreneurship and Co-evolution in Tourism

Marco Valeri and Leslie Fadlon

Abstract *Purpose* The aim of this paper is to verify whether the nature of the relationship between a tourist destination and tourist enterprises operating within its territory can be defined as co-evolutionary. This paper derives from the continuation of previous researches of ours about the topic of destination management and destination governance. *Design* The theoretical background of this paper is based on the following research question: within the framework of the international tourist scenario, are there tourist hospitality models designed as a prototype of co-evolution between the tourist destination and its territory? *Methodology* To this purpose, we conduct an extensive literature review on articles and papers dealing with innovation adoption, published in the last 41 years, i.e. from 1976 to 2017. We run content and structural analysis on the collected data. *Originality* The analysis perspective which is considered the most appropriate to qualify the nature of the relationship among a given tourist destination and its tourist enterprises is the co-evolutionary perspective. *Findings* The co-evolutionary process implies the identification of a governance body able to exploit and enhance the systemic resources made available by the territory and to inspire the management approach of the different tourist enterprises. *Limits* The absence of specific case studies represents a limit of the present paper. Hence, with a view to a subsequent future research, we will continue the proposed analysis by enriching it with empirical evidence, which will be useful to foster the debate on the subject matter and for the related entrepreneurial and management implications.

Keywords Co-evolution · Entrepreneurship · Sustainable development · Governance and destination management · Network · Competitive advantage

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M. Valeri (✉) · L. Fadlon
Faculty of Economics, Niccolò Cusano University, Rome, Italy
e-mail: marco.valeri@unicusano.it

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1 Introduction

In an increasingly complex tourist scenario, the competitiveness of a tourist destination depends on the entrepreneurial ability of each tourist enterprise operating in that area to measure against competitor tourist destinations, at both national and international level.

Therefore, each tourist destination needs to define its operative borders and identify a governance body, whether public, private or a mixture of both (Pencarelli 2001), able to develop a strategic direction that will enhance the enterprises and the potential highlights of the area. (Pechlaner and Weiermair 2000; Franch 2002; Golinelli 2002; Sainaghi 2006; Martini 2008; Valeri and Baiocco 2012). In this sense, the systematic ability of tourist enterprises to perceive and evaluate the external context is crucial, as it requires responses that need to be more and more accountable. (Golinelli and Simoni 2005). This could generate a possible source of creativity for a more sustainable development (Pechlaner et al. 2009; Valeri et al 2016). The governance and the management of tourist enterprises have the responsibility to promote the growth of a favorable organizational environment supporting the development of new tourist products/services that need to be economically profitable, socially accepted by the hosting community and aimed at protecting local environmental resources. This can be achieved by creating a working environment with human resources having strong innovative potentialities, focused on exploring new paths of development and willing to take significant risks at reasonable costs (Schianetz et al. 2007).

Therefore, the research questions upon which the theoretical background of the paper is based shall be: *within the framework of the international tourist scenario, are there tourist hospitality models designed as a prototype of co-evolution between the tourist destination and its territory*?

The article is framed into three main parts. The first part of the paper offers an effort of systematization of national and international literature on the concept of tourist destination and its governance issues. The second part is dedicated to the analysis of the co-evolutionary relationship between the tourist destination and the tourist enterprise. The third and last part focuses on the aspects of networking among the different actors who, within the tourist destination and at different levels, co-operate to the planning and the realization of the tourist offer system.

2 Tourist Destination: Analysis Perspectives

Over the years, the concept of tourist destination has been the subject matter of a heated scientific debate that has involved numerous national and international studies (Pechlaner et al. 2012; Borzyszkowski 2013). Nevertheless, until now there is still no univocal and satisfying definition of the concept of tourist destination, both from the interpretative and the managerial perspective. This justifies the existing confusion and the degree of difficulty to reach a fully convincing theoretical framework. While recognizing the difficulties involved in offering an effort of systematization of the existing literature, the doctrinal debate on the concept of tourist destination can be led back to two different analysis approaches (Valeri 2013):

Touristic demand, which emphasizes the destination as a tourist product or rather as a set of natural or artificial appealing factors able to attract tourists (Casarin 2007); Touristic supply, which emphasizes the importance of the offer system and of the tourist enterprises operating in the tourist destination (Tamma 2000; Martini 2002).

These two-analysis perspectives—touristic demand and tourist supply—have produced a wide range of positions supported by eminent academics, which have finally led to the theorization of an integrated approach.

The assumptions of both analysis perspectives merge into this integrated approach (Leiper 1979; Della Corte 2009; Buhalis 2000; Franch 2002). The integrated approach pinpoints the need, for the destination and the tourist enterprises operating in it, to adopt a considerably more managerial orientation than in the past.

The governance of a tourist destination can be considered as a system of decisions and actions aimed at consolidating and increasing the competitiveness of the tourist destination over time, defining clear and shared development goals among all the actors of the tourist system (Ritchie and Crouch 2003; Dwyer and Kim 2003; Ruhanen et al. 2010; Baggio and Cooper 2010; Pechlaner et al. 2011; Ford 2012; Paniccia et al. 2014). Therefore, the governance body, whether public, private or a mixture of both, has highly complex and structured functions and is able to determine the strategic orientation of the destination exercising financial and strategic territorial control. In particular, the governance body has the task to understand and promote the tangible and intangible elements that characterize the cultural identity of a destination compared to its competitors, at local, national and international level.

This implies a broad shared decision-making process, either for direct or indirect arrangements, at governance level of both each single tourist enterprise and of tourist destinations. Moreover, all decisions shall be aimed at increasing the attractiveness of the territory, and consequently, the competitiveness of the tourist destination. (Sciarelli 2007).

The governance activity includes actors/individuals who have an interest in the tourist destination (e.g. single managers, groups of workers) and/or an interest for the tourist destination: in this regard, reference is made to organizations considered “relevant” in the framework where the tourist destination operates (the so-called stakeholders).

Some of these stakeholders directly influence the objectives of the tourist destination (e.g. suppliers or tourist service brokerage firms); others represent either a public or a social interest towards the tourist destination, e.g. State organizations or citizens associations (Pechlaner et al. 2011; Beritelli and Bieger 2014; Pechlaner et al. 2014). According to prestigious researchers, where the model of the tourist fragmentation prevails, it is extremely "difficult to devise activities of destination governance expressing a strong and shared tourist offer management". On the other hand, in contexts characterized by cooperation models, with lesser fragmentation, it is easier to identify key subjects able to play significant roles within the destination (Tamma 2002). Within the framework of *Approccio Sistemico Vitale* (ASV) (Golinelli 2002) the governance body is in charge of the definition of the territory development strategy.

Identifying a governance body is a necessary but not a sufficient condition to develop an integrated tourist offer within a tourist destination. Influential researchers believe that it is necessary to support the governance body with a meta-management entity, having the specific task to address tourist destination enterprises towards strategic coherent paths (Pencarelli 2001). The meta-management body shall only support, and not substitute, the governance body, with the clear objective to facilitate shared processes of coherent strategic decisions among all actors, both private and public, who interact within the tourist destination (Martini 2002):

Engaging local actors in the definition of the strategic approach, highlighting benefits and overcoming conflicts;
Officializing the relationship between the governance body and the single enterprises;
Defining the control mechanisms and penalty measures against opportunistic attitudes;
Defining the transparency procedures for the distribution of results achieved.
Managing a tourist destination is an arduous job, as well as managing a tourist enterprise.

Difficulties lie in the planning of the strategic decisional processes and in the subdivision of the power of control over resources within the tourist destination.

This can be observed in both strongly hierarchical tourist destinations, with a well-identified strategic and managerial hub, and in corporate and community tourist destinations (Bieger 1998; Flagesta and Hope 2001). They both differ in terms of planning of tourist offer and therefore they experience different governance issues.

On one hand, identifying a governance body within a tourist destination is considered essential, whether this is public, private or an outcome of a balanced and diversified cooperation between private and public actors (Migliaccio et al. 2004). On the other hand, there is a real sense of how hard is to develop cooperative relationships among these actors in order to implement actions aiming at increasing the quality of tourist services compared to competing destinations (Breukel and Go 2009; Baggio and Cooper 2010; Volgger and Pechlaner 2014).

3 Co-evolutionary Perspective in Tourism

The most suitable analysis perspective to better qualify the nature of the relationship between tourist destinations and tourist enterprises is the co-evolutionary perspective.

According to this approach, tourist enterprises co-evolve with tourist destinations in the research of long-term competitive advantages: tourist enterprises are considered crucial for the development of the territory and vice versa (Henderson 1989; Paniccia 2006; Paniccia and Leoni 2017). The mutual dependence between the enterprise and the environmental framework significantly affects the ability to innovate, and consequently, the competitiveness of the individual enterprises as well as that of entire territories. This presumes strong abilities to explore and evaluate new business opportunities that the dialogue with the environmental framework is able to offer. The outcome is a planning and distribution of tourist services coherent with the real needs of the reference framework as well as with the enterprise's technical-organizational potential and its human resources. Therefore, enterprises and local contexts have to co-evolve in search of competitive advantages, the first being essential for the development of the second and vice versa. In order to co-evolve, a tourist enterprise has to stimulate the reference environmental framework, influencing the strategic actions of actors that operate in it, in a sustainable perspective (Valeri 2015; Valeri et al. 2016). This entails the ability of an enterprise to establish long-lasting relationships with the environmental framework, by engaging all actors of the territorial system through shared goals, motivations, knowledge and deadlines in order to create value in the co-evolution process (Cafferata 2014). Within the Italian tourist scenario, the albergo diffuso can be considered as the Made in Italy response to the co-evolutionary process triggered between the tourist destination and the territory, identifying a new role for the small accommodating business in the local economic and social system. It is about small businesses managed by self-employed, handymen, entrepreneurs, who need to be encouraged because, although in many different ways, they succeeded to integrate with the territory. In their visionary approach, they managed to blend traditional elements of the accommodation offer with relevant social and economic factors, such as the authenticity of territories and buildings, food and wine traditions, folklore and artisanship (Paniccia et al. 2014; Paniccia and Leoni 2017). The enterprise–environment relationship results in a dynamic network of relations, voluntary and structured, that bond the enterprise with other organizations operating in the same environmental framework.

Co-evolving is not easy (Lewin and Volberda 1999; Lewin et al. 1999; Paniccia 2006; Volberda and Lewin 2003). The co-evolutionary process implies the identification of a governance body able to enhance the systemic elements that the territory offers and to stimulate the organizational behaviors of the different tourist enterprises. This happens through a conscious strategic orientation, shared by all actors—whether they belong to the business or not, whether directly or indirectly involved in the evolutionary dynamics of the territory—that enables to improve the consonance and resonance circumstances with the other tourist enterprises (Trunfio 2008; Golinelli 2010). The governance and the management of tourist organizations have the responsibility to promote the development of a favorable organizational environment that supports the development of new tourist products/services that are economically profitable, socially accepted by the hosting community and aimed at protecting local environmental resources. How? By creating a working environment with human resources having strong innovative potentialities, focused on exploring new paths of development and willing to take significant risks at reasonable costs (Schianetz et al. 2007). This requires the existence of a stimulating environmental framework able to promote the development and the participation in challenging shared targets, which can be achieved in a working context that supports the growth of new knowledge.

Creating and maintaining such a context implies the existence of an internal organization structure specifically dedicated and oriented towards the development of innovation, where human resources are constantly challenged. Another element to take into consideration to create a suitable organization context is the setting up of an efficient and effective control system. The difficulty faced by the enterprises that want to create tourist product/services is trying to match the freedom of ideas with the efficiency of the development process. Control activities must not be too strict, not to prevent the most authentic initiatives. Creating the right degree of engagement, the development of new ideas would be easier (Landorf 2009; Epstein et al. 2010).

3.1 Co-evolution Model Between a Tourist Destination and a Tourist Enterprise

Co-evolving is not easy (Lewin and Volberda 1999; Lewin et al. 1999; Paniccia 2006; Volberda and Lewin 2003) and defining a thorough management model that can represent the process of co-evolution is just as difficult. Below is a model of co-evolution between a tourist destination and a tourist enterprise (Fig. 1), that is the result of the re-elaboration of management models confimed by national and international literature (Hrebiniak and Joice 1985; Golinelli 2002; Cafferata 2014).

The model can be interpreted in either a static or a dynamic way. It considers four different configurations of tourist offer system, determined according to the intensity of the aptitude shown by a tourist destination and a tourist enterprise in being able to activate mutual relationships with actors operating in the territory (Ma and Hassink 2013). The position in one of the four quadrants represents the different degree of aptitude. The four configurations are the following:

Absence of a co-evolutionary system of tourist offer (**I**). This group is characterized by the absence of a governance body of the tourist destination able to understand and exploit the elements featuring the territory identity, compared to competing destinations and to other tourist enterprises operating in it. This situations may jeopardize the competitiveness of the tourist destination and above all the outliving of the single tourist enterprises;

Presence of a system of tourist offer in the process of completion (**II**). This is the most recurring configuration. It is characterized by the presence of a governance body of the tourist destination involved in the exploitation and promotion of local resources. Nevertheless, cooperation processes between tourist enterprises and local actors are not yet well structured and therefore still on the way to be completed;

Presence of a co-evolutionary system of tourist offer (**III**). This group is characterized by the presence of a governance body of the tourist destination with full powers of orientation and coordination, focused on enhancing the territory identity conceived as a source of vitality of the tourist destination. The presence of a co-evolutionary system of tourist offer fully meets the necessary requirements allowing to put in place concrete actions that aim at exploiting the territory and that are vital to increase its competitiveness;

Presence of a tourist offer at an embryonic stage (**IV**). It is characterized, on the one hand, by the absence of a tourist destination's governance body in charge of coordinating and addressing the activity of exploitation of the territory and, on the other hand, by the prevalence of self-managed processes put in place by tourist enterprises. The extended absence of a governance body able to aggregate decisions and strategic actions on the territory may cause recession.

The position within one of the four quadrants of the co-evolutionary model depends on the synergic and mutual relationship between the ability of tourist enterprises to create value within the tourist destination they belong to and the level of attractiveness of the resources of the tourist destination itself. This prerequisite represents a significant and crucial leverage for the strategic orientation of the governance body of a tourist destination, with the aim to improve the competitiveness of the environment framework and to guarantee the outliving of local enterprises, whether tourist or not.

4 Strategic Networking in Tourism: Tourist Services and Clients

In today's complex competitive context, businesses need to own an increasingly qualified background of resources and expertise in order to compete with an ever more challenging competition. This results in an increase of specialization of the single enterprise that has actually created a reduction in the number and in the variety of shared knowledge and capabilities (Valeri and Paoloni 2016). The deep cognitive distance between individual enterprises and, at the same time, the lack of necessary resources to gain new knowledge may represent elements of friction for the cooperation processes. In this sense, networking can represent an organizational model suitable to promote the growth of small and medium-sized enterprises, which have only limited knowledge and resources essential to compete in an ever more complex market. Within the international scientific debate, researchers have focused their studies on the analysis of the evolutionary dynamic of networks and on the factors that influence their success over time (Gulati and Gargiulo 1999; Soda et al. 2004; Das and Teng 2002; Yin et al. 2012). Thanks to an interdisciplinary approach, that over the years has enriched the debate on the theory of networks (Parkhe et al. 2006), it is possible to mention some inputs identifying the evolutionary phases of the creation and development of inter-organizational relationships such as:

The reasons that have determined the origin of the network. These highlight, on one hand, both the central role played by elements related to the reputation of individuals and of the organization, and the existence of previous relationships. On the other hand, they also highlight the central role of those elements linked to possible investments, to the perceptions about the uncertainty of the business and the relevant actions to implement;
The necessary circumstances to build any kind of relationship between enterprises, starting from the features of potential members and their will to meet and agree on future conduct regulations;
The aptitude towards an agreement on future conduct rules and on control mechanisms aimed at governing conflicts.

In the specific case of tourist destinations and enterprises, the benefits deriving from belonging to a network can be:

Economic benefits: differentiation/diversification of the tourist offer in line with the specific needs of the customer segments, development through expansion/integration in new emerging markets, design of tourist products through the exploitation and enhancement of local resources;
Benefits from design and development of tourist products/services: greater access to sensitive information, by activating intelligence systems where possible, increased efficiency and effectiveness in productive processes, and optimization of costs.

Belonging to a network can promote the development of innovation of tourist enterprises involved and stimulate the creation of new business realities that operate in alternative markets, exploiting new knowledge and meeting new clients and tourist institutions (Saxena 2005; Morrison et al. 2004; Volgger and Pechlaner 2014). In the specific case of tourist destinations, which operate in a competitive and constantly evolving environment, relationships between actors are becoming more and more significant. Although at different levels, in fact, actors involved actively co-participate in the design and realization of the tourist destination offer such as (a) tourist suppliers and (b) tourists.

5 Conclusions and Limits

Within the framework of the international tourist scenario, are there tourist hospitality models designed as a prototype of co-evolution between the tourist destination and its territory?

All the considerations made in so far allow us to locate the subject of co-evolution between tourist destinations and tourist enterprises within a wider perspective, starting from the type of tourist involved in relationship. Where the market segments are characterized by a substantial simplicity, the intensity of co-evolution between tourist destinations and tourist enterprises is measured upon the satisfaction of the tourist. Differently, when the market segment is more complex, the intensity of co-evolution between tourist destinations and tourist enterprises is measured through a dialectic and continuous process of trial and learning between the two subjects, as a result of the evaluation of the needs expressed by consumers. In complex competitive contexts, this goal can be achieved only through a real involvement of the consumer in the definition of the features of the tourist product/service. To define their own strategies, in order to adapt tourist offer to tourist expectations, tourist enterprises shall arrange a series of managerial mechanisms able to evaluate market needs and then finalize them in innovative products/services. Facing competitive challenges, by promoting innovation, means being able to promptly take advantage of market needs and changes and suggest new ideas. Within the Italian tourist scenario, the albergo diffuso can be considered as the Made in Italy response to the co-evolutionary process triggered between the tourist destination and the territory, identifying a new role for the small accommodating business in the local economic and social system.

This paper represents an effort to organize the research in the tourist sector about aspects that are still not well defined. Despite the absence of case studies to support the theoretical framework, with a view to a subsequent future research, we will continue the proposed analysis by enriching it with empirical evidence, that will be useful both to foster the debate on the subject matter and for the related entrepreneurial and management implications.

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Chapter 5
Project ArchaeoCulTour: Innovative Valorization of Archaeological Heritage in Istria County Through Sustainable Cultural and Creative Tourism

Kristina Afrić Rakitovac, Nataša Urošević and Nikola Vojnović

Abstract The paper will present the conceptual and analytical framework for the research on the development potential of archaeological heritage in Istria County, Croatia, through sustainable tourism. Starting from the comparative analysis of the European as well as regional and national best practice in valorization of this specific category of heritage, the authors will propose the innovative research methodology and the most appropriate models of sustainable valorization of archaeological heritage, such as the eco-archaeological parks, open-air museums and interpretation centers, living history programs, cultural routes and educational paths, as well as community digs and practical workshops as models of participatory heritage management which would involve the local community too. The research included a hybrid methodological approach, combining qualitative and quantitative methods and interviews with all interested stakeholders (local community, visitors, experts). The main aim of the research, conducted in the framework of the project ArchaeoCulTour (The Archaeological Landscape in Sustainable Development of Cultural Tourism in Vrsar Municipality), was to develop a successful innovative strategy for sustainable cultural tourism growth in the most developed Croatian tourist region, Istria, characterized by abundance of archaeological sites, which are unfortunately still not adequately valorized, presented and interpreted. The preliminary analyses indicated the lack of comparative thinking in this area as well as the need to use and promote the European best practice in development of sustainable cultural tourism destinations, proposing the models to present the regional archaeological treasure in the most proper way.

Keywords Archaeology · Cultural heritage · Sustainable tourism · Istria

JEL Classification Z10 · Z32

K. Afrić Rakitovac (✉) · N. Urošević · N. Vojnović
Juraj Dobrila University of Pula, Preradovićeva, Pula, Croatia
e-mail: kafric@unipu.hr

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1 Introduction

In this paper the preliminary results of the research conducted in the framework of the recent project ArchaeoCulTour (The Archaeological Landscape in Sustainable Development of Cultural Tourism in Vrsar Municipality) will be presented. The main aim of the research was to develop a successful innovative strategy for sustainable cultural tourism growth in the most developed Croatian tourist region, Istria, characterized by abundance of archaeological sites, which are unfortunately still not adequately valorized, presented and interpreted. The analysis was aligned with the key objectives of the ArchaeoCulTour project: to investigate archaeological sites with potential for tourist presentation and merge archaeological heritage data into a comprehensive database, which results could be applied for development of thematic maps related to the tourist presentation; systematic monitoring to preserve the heritage; increasing visibility and expanding knowledge of the importance of archaeological sites in the local community with the purpose of its appropriate valorization.

Starting from the comparative analysis of the European as well as regional and national best practice in valorization of this specific category of heritage, the authors proposed the innovative research methodology, which included a hybrid methodological approach, combining qualitative and quantitative methods and interviews with all interested stakeholders (local community, visitors, experts). The authors have tested the key hypotheses on the local case study—elaborating potentials for valorization of archaeological heritage in the Municipality of Vrsar in Western Istria, which represents a typical coastal tourist destination in Croatia and on the Mediterranean, characterized by mass tourism and a remarkable seasonality: H1: mass tourism and high seasonality are still predominant models in Croatian tourism; H2: the most important Croatian tourist region, Istria, has a great potential for development of cultural and creative tourism as sustainable alternatives to mass tourism; H3: cultural and creative tourism could diversify demand in space and time; H4: cultural and creative tourism could involve local community in heritage preservation; H5: archaeological heritage in Istria could be more adequately valorized, presented and interpreted through sustainable cultural and creative tourism; H6: the proper models of archaeological heritage management could help to sustainable development of tourism and the local community in the Municipality of Vrsar too.

Bearing in mind the local community commitment to sustainable and inclusive development, the authors explored potentials of cultural and creative tourism, which included the most appropriate models of sustainable valorization of archaeological heritage, such as the eco-archaeological parks, open-air museums and interpretation centers, living history programs, cultural routes and educational paths, as well as community digs and practical workshops as models of participatory heritage management which would involve the local community too (Afrić Rakitovac and Urošević, 2017).

2 Conceptual Framework—Literature Review

Since the preliminary analyses indicated the lack of comparative thinking in this area as well as the need to use and promote the European best practice in development of sustainable cultural tourism destinations (Mergos and Patsavos, 2017; Athanassopoulos, 2004; Timothy and Boyd, 2003; Cleere, 2000), the first phase of the research included literature review and definition of key concepts as well as comparative analysis of the European, regional and national best practice in valorization of this specific category of heritage.

ICOMOS defines archaeological heritage as “that part of the material heritage in respect of which archaeological methods provide primary information. It comprises all vestiges of human existence and consists of places relating to all manifestations of human activity, abandoned structures, and remains of all kinds (including subterranean and underwater sites), together with all the portable cultural material associated with them”. The archaeological heritage constitutes the basic record of past human activities. Its protection and proper management is therefore essential to enable archaeologists and other scholars to study and interpret it on behalf of and for the benefit of present and future generations. For these and other reasons the protection of the archaeological heritage must be based upon effective collaboration between professionals from many disciplines. It also requires the cooperation of government authorities, academic researchers, private or public enterprise, and the general public. Since the archaeological heritage is a fragile and non-renewable cultural resource, its protection of the archaeological heritage should be integrated into planning policies at international, national, regional and local levels. Active participation by the general public must form part of policies for the protection of the archaeological heritage (ICOMOS 1990).

According to European Convention on the Protection of the Archaeological Heritage (Council of Europe, 1992) archaeological heritage shall include structures, constructions, groups of buildings, developed sites, moveable objects, monuments of other kinds as well as their context, whether situated on land or under water, which should be protected as a source of the European collective memory and as an instrument for historical and scientific study.

Archaeological heritage is a concept wide in scope which encompasses all mobile and immobile monuments and the objects of the material culture of the past within a certain region. Archaeology studies the material culture of past epochs, although it has become the norm that the focus is on epochs lacking in written sources, or such sources which are of a smaller scope. Historical written sources, and archaeological heritage, together inform a story of the past. Until the second half of the 20th century, it was common to consider the upper boundary of archaeology to be the early or high Middle Ages (8–12th centuries), yet the application of archaeological methods, when researching heritage, has increasingly extended itself to include later historical periods such as the 19th and 20th centuries. Archaeological sites are places in which the remains of buildings and other solid structures created by the hand of man are located in the form in which they have been found, and are of such dimensions that they cannot be transferred to a museum or similar collection. According to how they have been physically positioned, sites can either be terrestrial or marine (Buršić-Matijašić and Matijašić 2017).

The overall objective of *archaeological heritage management* should be the preservation of monuments and sites in situ, including proper long-term conservation and duration of all related records and collections etc. (ICOMOS 1990). In that context, very useful could be also McKercher's and DuCros's definition of cultural heritage management as the management of cultural resources, which include the systematic care for the sustainable maintenance of the cultural values of cultural goods in order that today's and future generations can enjoy them. Its main goal is to conserve and protect a representative sample of our heritage for the future (McKercher and du Cross 2002). Attention that professionals give to protection, preservation and presentation of archaeological heritage is revealed, among other things, through many archaeological sites that are on display for anyone interested and are now a part of the cultural tourism offer. Many of these sites, beside the very presentation of the architecture or modern reconstructions, offer some other elements, such as festivals, historical improvisations and other manifestations, experiments or various workshops, through which they are approaching the concept of an "archaeological park" (Mihelić 2009, 83).

Archaeological parks are places in which archaeological sites have been appropriated for visits, sight-seeing and education. They can be either in an urban or (more often) outside of an urban setting, and what is understood by this is the physical arrangement of archaeological remains by conservation or other forms of protection, the arrangement of paths and other equipment which allows the movement and sojourn of visitors, the arrangement of access and transport infrastructure. Their connection to tourism is without question, but they also have an important role in fulfilling the recreational and educational needs of the local population. Research has shown that there is an increased awareness on the importance of the presentation of heritage to the public, with pedagogical and educational implications, as well as tourism (Brajčić 2014).

Bearing in mind the regional specificity, the authors analyzed the best practice in sustainable valorization of archaeological heritage in the Euro-Mediterranean area: eco-archaeological parks, open-air museums and interpretation centres in Italy (Pompeii, Sicily), Greece (Athenian Acropolis, Delphy, Mycenae), Spain and Malta as well as the current situation in Croatia and Istria. Among the most famous and best presented prehistoric archaeological sites we could mention also Stonehenge in UK, Megalithic Temples of Malta, the ancient fortresses on the Aran Islands in Ireland or Talaiotic sites of Menorca, Spain. In Croatia, Vučedol Culture Museum or Museum of Krapina Neanderthals are good examples of multimedia interactive presentation and interpretation of prehistoric sites. The period of classical antiquity is well represented by Athenian Acropolis or Delphy, as well as by Italian archaeological parks in Rome, Pompeii, Siracusa and Agrigento (Valley of the Temples). Among the most important Croatian archaeological parks from the Roman Period we could mention the Andautonia Archaeological Park and Ecomuseum near the Croatian capital Zagreb, the Sopot Archaeological Park near

Vinkovci, or Acqua Iasae, an important Roman settlement next to a thermal spring of healing water (Mihelić 2009). Besides Narona and Salona (the largest archaeological site in Croatia) in Dalmatia, the most important archaeological parks in Istria are Brijuni, Vižula, Nezakcij and Monkodonja (remains of a fortified Bronze Age settlement near Rovinj). The Istrian peninsula features an exceptionally dense concentration of fortified, hill fort settlements and numerous stone mounds that often represent remains of Bronze Age funerary monuments (more that 300 sites). The biggest archaeological park in Istria was created in the Brijuni Islands National Park, an archipelago of fourteen islands and islets. On the picturesque islands, inhabited already in prehistory were built luxury Roman maritime villas, and cultural layers from all periods were explored (Kalčić 2007). Brijuni are also the only archeological park in Istria for which a ticket is charged. The Islands are visited annually by more than 160.000 tourists (Table 1).

Innovative participatory heritage management models include also cultural routes and educational paths, as well as experimental archaeology, community digs and practical workshops, which could involve the local community too. *Archaeological itineraries* (cultural routes and educational paths) are created by amalgamating archaeological attractions or various elements that form the complex cultural, historical, archaeological and ethnographical heritage of a particular area and their ample presentation, and as a result a completed story is achieved, which speaks with much more sense about every particular attraction than an individual presentation could. Among the most original thematic routes aimed at valorizing the archaeological heritage in Croatia is the Neanderthal Trail, which includes the sites with Neanderthal finds and geographically encompasses both continental and littoral parts of Croatia, from Krapina to Istrian and Dalmatian caves (Mihelić 2009, 323–324).

An increasingly popular form of interpretation of archaeological heritage are "*living history* " or "*living museums*" programmes, where the visitors can experience and taste the way of life, gastronomy and leisure of ancient inhabitants. We can mention festivals, such as "Ancient days in Pula" or "Sepomaia Viva—International Festival of Classical Antiquity" in Umag, "Ten Days of Diocletian" in Split or "Days of Andautonia" as the most successful living history program in continental Croatia.

Archaeotourism or archaeological tourism is an alternative type of cultural tourism that aims at promoting the passion for protection and valorization of historical sites. It offers the traveler an unforgettable experience through intensive courses about these specialized manifestations of human knowledge. The passion for history and heritage can be manifested in tourism through offering the excavation of as yet undiscovered finds, which puts the traveler in a position to directly

Table 1 NP Brijuni—annual number of visitors

2013	2014	2015	2016	2017
151.007	153.084	160.010	182.560	166.303

Source NP Brijuni

experience the practice of archaeology that is the learning of a new skill. On the other hand, archaeological tourism implies also simple visits to archaeological sites, museums, interpretation centers, reenactments of historical events, festivals, theatres, and all those products connected with promoting archaeology to the public (Jelinčić 2009, pp. 27–28). Archaeological tourism resources include: sites on the World Heritage List, protected urban entities and monuments, archaeological sites and archeological landscapes, museums and archeological parks, as well as different 'living history' events and manifestations.

In that sense, archaeological tourism can be seen as a kind of creative tourism, i.e. tourism which offers visitors the opportunity to develop their creative potential through active participation in courses and learning experiences, which are characteristic of the holiday destination where they are taken (Raymond and Richards 2000). As a complement to *cultural tourism*, which 'cares for the culture it consumes while culturing the consumer' (Richards 2007, 1), *creative tourism* is travel directed toward an engaged and authentic experience, with participative learning in the arts, heritage, or special character of a place, and it provides a connection with those who reside in this place and create this living culture (UNESCO 2006). The benefits of creative tourism, as a sustainable alternative to classical mass tourism are already recognized: Creative tourism allows diversification of the tourist offers without any investment, just by optimizing existing tangible and intangible heritage. It supports quality tourism endowed with a high added value and purchasing power, based on authenticity and sustainability as it uses the creativity and culture as mean resource. There is a positive effect on the self-confidence of the local people thanks to this new interest for their culture and tradition. Its deseasonalizing character allows a better distribution of the tourist activity along the year. The minor interest of creative tourists in traditional "tourist attractions" contributes to a better spatial distribution within the destination and to intangible heritage recovery. Creative tourism could bring more skilled, experienced and educated tourists, who are looking for more interactivity. They want to experience the local culture by participating in artistic and creative activities, to live experiences where they can feel themselves as a local.

They spend a substantial part of the budget for the fulfillment of these activities/experiences, combining many types of tourism, during the same journey: creative, culinary, eco-tourism and slow tourism.

All these characteristics of the creative tourism, which value and enrich natural, cultural and human resources instead of exploit them in an unsustainable way could help to resolve the mentioned key problems of tourism in Istria and Croatia, but also in other similar Mediterranean destinations: high seasonality and concentration on the coast as well as inadequate valorization of the key local resources, including archaeological heritage.

The Strategy for the Protection, Conservation and Sustainable Economic Use of Cultural Heritage of the Republic of Croatia for the Period 2011–2015 defined the key issues in archaeological heritage management in Croatia (Ministry of Culture 2011, 40): inadequate documentation of archeological sites, low level of valorization of archeological sites, inadequate infrastructure equipment, inadequate presentation and interpretation and management of visitors, unclear property and legal relations, inadequate cooperation with the economic sector in innovative interpretation programs, lack of planning and systematic training of staff for protection and conservation; lack of archaeological sites management plans, containing conservation component and sustainable use, lack of finance for the development of archeological parks, low levels of awareness of local citizens, local and regional self-government and educational institutions on the value of archaeological heritage as identity bearer, recognizability, sense of belonging and potential for sustainable use.

The archaeological heritage management planning process includes the following phases:

1. Involving different stakeholders in the planning process
2. Documenting the history of the site
3. Evaluation/valorisation of the site
4. Physical state and management context analysis
5. Definition of objectives (governance policy)
6. Selection of management strategies
7. Implementation, monitoring and revalorization of the process (Rukavina and Obad Šćitaroci 2016; Sullivan and Mackay 2012).

An important starting point for archaeological heritage management is the inclusion of all relevant stakeholders (local communities, tourism workers, city authorities, archaeologists, scientists, ministries of culture and tourism, planners and planners and others interested) in designing and planning.

Documentation of the history and location of the site involves collecting all the information about the site, its history and its current state. Based on these data, a site evaluation is carried out to determine and preserve its value fully, define goals and select a proper management strategy. The information collected on the management context (social, economic, political, legal and physical aspect of the site) and situational analysis, are inputs for the SWOT matrix.

The data obtained are the starting point for defining goals, policy and strategy that are based on previously collected information on the value, state and context of the site. The policy defines the principles and guidelines for further action. Special emphasis is placed on strategies that include maintenance, conservation and visiting. They include strategies for enhancing, using, and integrating archaeological heritage into contemporary life (Rukavina and Obad Šćitaroci 2016).

3 Methodology

Since the base of each strategic planning is a detailed situational analysis, the first phase of the research included gathering data on the field situation and researching the views of key local stakeholders. The authors proposed the innovative research methodology, which included a hybrid methodological approach, combining qualitative and quantitative methods and interviews with all interested stakeholders (local community, visitors, experts). The main aim of the research was to develop a successful innovative strategy for sustainable cultural tourism growth in the most developed Croatian tourist region, Istria, characterized by abundance of archaeological sites, which are unfortunately still not adequately valorized, presented and interpreted.

The authors have tested the key hypotheses by elaborating potentials for valorization of archaeological heritage in the Municipality of Vrsar in Western Istria, as a typical coastal tourist destination in Croatia and on the Mediterranean, characterized by mass tourism and a remarkable seasonality: H1: mass tourism and high seasonality are still predominant models in Croatian tourism; H2: the most important Croatian tourist region, Istria has a great potential for development of cultural and creative tourism as sustainable alternatives to mass tourism; H3: cultural and creative tourism could diversify demand in space and time; H4: cultural and creative tourism could involve local community in heritage preservation; H5: archaeological heritage in Istria could be more adequately valorized, presented and interpreted through sustainable cultural and creative tourism; H6: the proper models of archaeological heritage management could help to sustainable development of tourism and the local community in Municipality of Vrsar too.

According to the proposed archaeological heritage management process, the research conducted in the framework of the situational analysis included workshops involving all key stakeholders, whose main purpose was to define the current situation, main problems and development priorities. Interviews and focus groups with experts were supplemented by local community survey and questionnaires for tourists, in which the attitudes towards the key attractions and development resources as well as the most appropriate models of sustainable cultural tourism development were explored (Richards and Munster, 2010). The first phase, conducted in March 2018, included interviews and focus groups with 15 experts, with the aim to define key issues and collect information for situational analysis. Local community survey was conducted from March to May 2018 and involved 200 inhabitants of Vrsar. The third phase of research, from May to September 2018, will involve 450 tourists.

The preliminary results pointed to key issues in destination dynamics, such as the willingness of the local community to be involved in tourism development planning, to develop in more sustainable way and to present and interpret the key cultural values and traditions adequately, not only to visitors but also to locals, through workshops, educational paths and interpretation centers.

4 Istria—The Leading Tourist Region in Croatia

Due to its extremely favorable geographic location in relation to the emissive tourist markets and regions of Central and Western Europe and the diverse natural and anthropogenic attractions, Istria County is today the most developed tourist region in the Republic of Croatia.[1] In Istria in 2016 a fourth of tourist beds were registered in commercial accommodation facilities, a quarter of total tourist arrivals and almost a third of total tourist nights of the Republic of Croatia. In Istria are located 10 of the 25 top tourist destinations in Croatia, according to the total number of overnight stays of tourists (Central Bureau of Statistics 2017a). Geographical layout of tourism in Istria was developed in the first decade of this century to the extent that it is the only county in the Republic of Croatia, along with Primorje-Gorski Kotar County, which has commercial accommodation tourist facilities in all municipalities and cities (Curić et al. 2012).

Despite this layout, tourism in Istria has been largely geographically concentrated in coastal destinations in the last fifty years. Similarly, tourist arrivals and overnight stays have an extreme seasonal concentration in the summer months, reflecting the consequences of a tourism development model that is adapted to stationary, summer holiday tourism and the season of holidays, including the school holidays in nearby emissive regions (Ivandić et al. 2006). Furthermore, the largest contribution to Istrian tourism is given to those destinations that individually realize more than a million tourist nights. In 2016 there were a total of 10 such destinations: seven on the western Istrian coast: Funtana, Novigrad, Poreč, Rovinj, Tar-Vabriga, Vrsar and Umag, two on the southern part of the Istrian coast (Medulin and Pula) and Labin on the eastern coast.[2] In the area of these ten destinations in 2016, a total of 235 531 beds were registered in commercial accommodation facilities, which is 80% of beds in the region of Istria. In the same year, there were 3,212,775 tourist arrivals (85.4% of all arrivals in Istria) and realized 19,252,042 total nights, which is 83% of all overnight stays in Istria (Table 2).

The top Istrian tourist destinations are also characterized by a significant geographical and socioeconomic burden on the tourist activities and amenities. The analysis of the tourist intensity rate (TIR), tourist density rate (TDR) and the influence of tourist activities on the destination (TL)[3] significant deviations and differences between the top destinations and the region Istria have been identified (Table 3).

The tourist intensity rates (TIR) of the top destinations significantly exceeds the result for the Istrian region, while within the ten top destinations there is a distinct difference between Funtana and Pula, which is understandable given the population

[1]The Istrian Region is geographically equalized with the regional self-government unit of the Istrian County which consists of 31 municipalities and 10 cities.

[2]According to the criterion of accessibility, feasibility and comparability of destinations, they are geographically and administratively equal with the areas, the number of inhabitants and the total number of beds in commercial accommodation facilities, the total number of arrivals and overnight stays of tourists of the same local self-government units (towns and municipalities).

[3]The tourist intensity rate or the intensity of tourist traffic (TIR) shows the number of tourists for every 100 residents in a destination. The tourist density rate (TDR) is shown by the number of arrivals or overnight stays per diem in an individual area (km^2) of a destination. The impact of tourism activity on a locality (TL) is a rate which shows the density of tourist beds in commercial accommodation facilities for an individual destination area (km^2).

Table 2 Top destinations in Istria according to the number of beds, tourist arrivals and overnight stays in 2016

Destinations	Beds	Destinations	Tourist arrivals	Destinations	Tourist overnights	Average stay
Medulin	37,511	Rovinj	561,023	Rovinj	3,329,703	5.9
Rovinj	36,917	Poreč	511,898	Poreč	2,925,510	5.7
Poreč	27,571	Umag	408,213	Medulin	2,410,444	6.6
Pula	26,983	Medulin	365,457	Umag	1,960,834	4.8
Umag	24,959	Pula	330,590	Pula	1,606,582	4.9
Vrsar	19,821	Vrsar	214,177	Tar-Vabriga	1,598,574	7.7
Tar-Vabriga	18,553	Novigrad	207,644	Vrsar	1,562,243	7.3
Funtana	17,146	Tar-Vabriga	207,623	Funtana	1,512,243	7.6
Novigrad	13,123	Labin	206,666	Labin	1,253,394	6.1
Labin	12,947	Funtana	199,484	Novigrad	1,092,515	5.3
Ukupno	235,531	Ukupno	3,212,775	Ukupno	19,252,042	6.0
Istra	295,337	Istra	3,763,174	Istra	23,128,233	6.1

Source Calculated by the authors according to the data from the Croatian Bureau of Statistics (2017a)

Table 3 Tourist intensity rate (TIR), tourist density rate (TDR) and the influence of tourist activities on the destination (TL) in 2016

Destination	Area (km^2)	Population	TIR	Destination	TDR	Destination	TL
Funtana	796	964	2,069,336	Funtana	51,907	Funtana	215,402
Vrsar	3,646	2,149	996,636	Medulin	19,302	Medulin	109,938
Tar-Vabriga	2,711	2,224	933,557	Tar-Vabriga	16,111	Tar-Vabriga	68,436
Medulin	3,412	6,866	532,271	Rovinj	11,742	Vrsar	54,364
Novigrad	2,658	4,481	463,388	Vrsar	11,707	Pula	50,136
Rovinj	7,748	14,451	388,224	Novigrad	11,230	Novigrad	49,372
Poreč	11,167	17,127	298,884	Pula	8,156	Rovinj	47,647
Umag	8,218	13,828	295,208	Poreč	7,158	Umag	30,371
Labin	7,231	11,057	186,910	Umag	6,519	Poreč	24,690
Pula	5,382	56,527	58,484	Labin	4,736	Labin	17,905
Ukupno	52,969	129,674	247,758	Ukupno	9,931	Ukupno	44,466
Istra	2,813	208,109	180,827	Istra	2,246	Istra	10,499

Source Calculated by the authors according to the data from the Croatian Bureau of Statistics (2017a, b)

of these two destinations. The Tourist density rate (TDR) yet clearly points to the polarized development of tourism, in which Funtana, Medulin and Tar-Vabriga stand out. According to the value of density of tourist beds in commercial accommodation facilities for an individual destination area (TL), the top destinations quadruple exceed the average for the region of Istria, which confirms the polarization of tourism development and the burden of smaller destinations. Such spatial-time concentration of tourist arrivals and overnights points to the need of reaffirmation of the tourism supply and revaluation and different profiling of the natural and anthropogenic attraction basis.

As a typical case study that is further discussed, clarified and interpreted, because of the geographical concentration and the remarkable seasonality of tourism in the Istrian region, the Municipality of Vrsar was chosen. This destination is located on the western Istrian coast, in the southern part of the tourist micro-region Poreč-Vrsar littoral. This micro-region is the most developed tourist area in Istria and Croatia, where tourism and supporting activities have most influenced the entire geographical and socio-economic transformation of the cultural landscape (Iskra 1991; Perkovac 1993; Hrvatin 2006). Destination Vrsar is the municipality of the same name with nine settlements of which the majority of the population and the largest number of central functions has Vrsar settlement. Also, the municipality administration is located in the Vrsar settlement. The municipality has 2149 inhabitants at the end of 2016, according to the estimates of the Central Bureau of Statistics (2017b). Most of inhabitants (82%) live in Vrsar settlement. In this settlement there are 99% of all beds in commercial accommodation facilities of the municipality, including hotels and camps. In other settlements there are individual facilities (apartments, rural villas) intended for a shorter holiday. Therefore, the tourist development in the Vrsar destination showed a marked geographical orientation on the coastal area of Vrsar and significant concentration in the summer season and activities related to stationary, restful tourism with stable growth of all indicators (Table 4).

For example, in two key summer months—July and August 2016, the destination of Vrsar was visited by half of its tourists and 60% of the tourist overnights of that year were registered. Furthermore, in four months (June, July, August and September) in 2016, when the sea temperature permits pleasant swimming and other seaside recreation, the destination of Vrsar recorded 80% of all tourists arrivals and 88% of all overnight stays (Central Bureau of Statistics 2016). Seasonality of tourism and its geographical concentration in one settlement raises the issue of spatial and socioeconomic sustainability, although tourism and the similar activities provide to the local population numerous benefits. Considering the benefits that tourism has achieved, the example of Vrsar points to the necessity of

Table 4 Number of tourist beds, arrivals, overnights and average stay in Vrsar 2012–2016

Year	Beds	Tourist arrivals	Tourist overnights	Average stay
2012	18,763	177,469	1,429,075	8.1
2013	18,911	175,668	1,387,941	7.9
2014	19,026	187,475	1,414,816	7.5
2015	19,610	201,649	1,461,433	7.2
2016	19,821	214,177	1,562,246	7.3

Source Calculated by the authors according to the data from the Croatian Bureau of Statistics (2013–2017) strengthening differentiation of tourist supply in the direction of profiling sport, rural, cultural and creative tourism with the aim of releasing the summer season and reducing pressure on the narrow coastal belt.

5 Results—Valorisation of Archeological Heritage Through Sustainable Cultural and Creative Tourism—Vrsar as a Case Study

In the framework of the current project ArchaeoCulTour, the authors analyzed situation and potentials for sustainable valorization of archaeological heritage in Municipality of Vrsar, which was chosen as a case study because it has all characteristics of a typical Mediterranean tourist destination: high seasonality, mass tourism concentrated on the coast; inadequately valorized cultural heritage which is still not recognized as an important and valuable tourist resource and the tourism management model which is not enough participatory and inclusive, regarding the local creative resources. The territory of the Municipality of Vrsar on the western Istrian coast was inhabited since the earliest prehistory (Lower Paleolithic) until today, when Vrsar has become one of the most important centres of Istrian tourism. For that reason the collaboration of archaeology and tourism can be a good model for elaborating the possible forms of symbiosis, on which new paradigms for use in other historical-geographical and economic environments can be tested. The base for sustainable development of archaeological tourism could be also a very interesting and unique combination of the luxurious Roman villas built on the place of the former fortified, hillfort settlements from the Bronze Age. There are prehistoric hillforts in the territory of the Vrsar Municipality (Montegon, Mukaba, San Giorgio Island, Gradina, Monte Ricco, Vrsar: Buršić-Matijašić 2007), but none have been explored, so that a potential for future research is found in this field as well. A recently explored Bronze Age hillfort Monkodonja near Rovinj is a good example of an archaeological site well positioned in the context of a heritage—tourism symbiosis. The archaeological site of Monte Ricco is a prehistoric Bronze Age hillfort, which has been settled again at the turn of the Roman era in the 1st century B.C., when a luxurious villa rustica with a large cistern was built on the hill. The most famous local archaeological site is the a Late Roman residential building in Vrsar Harbour, where life pulsated during the whole antiquity, which is testified by new research conducted during recent years.

The preliminary results pointed to key issues in destination dynamics, such as the willingness of the local community to be involved in tourism development planning, to develop in more sustainable way and to present and interpret the key cultural values and traditions adequately and in a more creative way, not only to visitors but also to locals, through workshops, educational paths and interpretation centres. In the first phase of situational analysis, the authors elaborated the current issues regarding tourism and potentials for valorization of the most valuable local cultural resources in a more sustainable and creative way, by interviewing key stakeholders and organizing workshops and focus-groups with experts. According to the purpose of this paper, the authors have conducted an empirical research aimed to find out the reflections of relevant experts regarding the actual situation and potentials of promoting and presenting archaeological sites through the sustainable cultural tourism concept. The authors have used the qualitative methodology of structured interviews, which were realized in April 2018. The results of the interviews and focus-groups with 15 experts from tourism and culture sector, local and regional government, archaeologists, scientists, NGO-s and representatives of the local community, are analyzed and presented in the following SWOT-matrix (Table 5).

The presented results of the situational analysis indicate the most important issues related to current situation and potentials for the more sustainable valorization of unique local cultural resources through cultural and creative tourism. It is obvious that, despite very rich natural and cultural heritage resources, the tourist offer is still characterized by high seasonality and mass tourism concentrated on the coast. Lack of strategic planning, collaboration and coordination of key stakeholders, inefficient destination management and inadequate spatial planning are supplemented by inadequate valorization of cultural heritage and local creative resources, which are still not recognized as a development potential and a motive for visiting Vrsar. On the other hand, local stakeholders see the opportunity for sustainable development of cultural tourism through creative valorization and interpretation of unique and most valuable local cultural resources.

This local case study could help to understand the current situation and potential for transition from the still dominant mass, beach tourism model focused on relaxation and leisure, via cultural tourism oriented toward classical cultural tours and tangible heritage to innovative models of creative tourism, which involve more interaction, and in which the visitor has an educational, emotional, social, and participative interaction with the place, its living culture, and the people who live there. Co-creation of creative tourist destination should include more involving and meaningful experience for both tourists and the local community.

The archaeological and other forms of creative eco-tourism, which allow co-creation of a different tourist experience, learning and exchange of information and knowledge between visitors and their hosts could help to cure the most important problems related to unsustainable tourism in the broader Euro-Mediterranean region: high-seasonality and geographic concentration of mass tourism which threatens the most valuable elements of tangible and intangible heritage. Such travel, directed toward an engaged and authentic experience, with participative learning in the arts, heritage and special character of a place, will not only provide a connection with local community but also link in an innovative way the common past with a more sustainable future.

Table 5 Swot matrix on the potentials of valorisation of archaeological heritage in Istria County through sustainable cultural and creative tourism in Vrsar

Strengths	**Weakness**
- favourable strategic position - preserved nature and environment - proximity of the Lime channel (protected natural area) - preserved and rich cultural heritage (churches, mosaics, sculpture garden, traditional gastronomy, archaeological sites, etc.) - active tourism (bikes, trail and trekking, climbing, kayak, diving) - proximity of Marina Vrsar, one of the best nautical ports in Croatia - small, safe and quiet place	- sun and sea tourism model - insufficiently diversified tourism supply - high seasonality (tourist arrivals concentrated mainly in the summer season from May to September) - insufficient valorisation of cultural heritage - insufficient collaboration and coordination of key stakeholders - inefficient destination management - inadequate spatial planning - lack of qualified employees (staff) in the last few years - insufficient high quality accommodation facilities - insufficient sport facilities - insufficient collaboration of the public and the private sector - cultural heritage is not recognised as a motive for choosing Vrsar as a tourism destination - relatively low tourist consumption - insufficient tourist attractions - lack of an institution for cultural and natural heritage management - lack of strategic planning - insufficient involvement of the local community in tourism planning and realisation of projects - lack of cultural routes - lack of specialised tourist guides for cultural tourism - lack of cultural tourism strategy

Opportunities	Threats
- developing cultural tourism through the project of arranging the monastery of St. Mihovil, participation in various Interreg projects and the ArchaeoCulTur project - valorisation of cultural heritage through sustainable cultural tourism (churches, od city centre, mosaics, archaeological site Monte Ricco, archaeological sites in the Lim channel and forest Kontija, quarry Montaker with the sculpture school, the story about "pietrad'Orsera (Orsera's stone), painter Edo Murtić, itinerary Casanova Tour in collaboration with Istra Inspirit, etc.) - organisation of interactive workshops and events or programs of revived history - development of cultural routesarchaeological parks**,** cultural routes**,** interpretational centres/museums - improved and more specified promotion of the destination - Vrsar as a city of sculptures – potential brand - project of underwater sculptures	- climate changes - competition of neighbouring tourism destination with similar tourism concept based on sun and sea - decreased interest of tourists

Source: Authors' research

6 Conclusion

The conducted research, whose main aim was to define the conceptual and analytical framework for the research on the development potential of archaeological heritage in Istria County, Croatia, indicated some of the key issues and problems related to archaeological heritage management and its sustainable valorization through cultural and creative tourism. The first phase of the research, which involved all relevant stakeholders in the participatory heritage management process, confirmed most of the key hypotheses. Local community and experts agree that:

– mass tourism and high seasonality are still predominant models in Croatian tourism;
– the most important Croatian tourist region, Istria has a great potential for development of cultural and creative tourism as sustainable alternatives to mass tourism;
– cultural and creative tourism could diversify demand in space and time, extending the season and valorizing areas beyond the cost;

– local community should be more involved in heritage preservation and sustainable tourism development plans;
– archaeological heritage in Istria could be more adequately valorized, presented and interpreted through innovative models of cultural and creative tourism;
– creative models of heritage presentation and interpretation could help to sustainable development of tourism in the Municipality of Vrsar; and the local community in Municipality of Vrsar too.

Comparative analysis of regional, national and European good practice in sustainable valorization of archaeological heritage has shown that there already exist successful models which could be used in the process of developing of innovative strategy for sustainable cultural tourism growth in the most developed Croatian tourist region, Istria, characterized by abundance of archaeological sites, which are still not adequately valorized, presented and interpreted. Elaborated potentials for valorization of archaeological heritage in the Municipality of Vrsar in Western Istria could be useful also for other coastal tourist destinations in Croatia and on the Mediterranean, characterized by mass tourism and a remarkable seasonality. The local case study could help to understand the current situation and potential for transition from the still dominant mass, beach tourism model focused on relaxation and leisure, via cultural tourism oriented toward classical cultural tours and tangible heritage to innovative models of creative tourism, which involve more interaction, and in which the visitor has an educational, emotional, social, and participative interaction with the place, its living culture, and the people who live there. Co-creation of creative tourist destination should include more involving and meaningful experience for both tourists and the local community.

The preliminary analysis indicated also the most appropriate models of sustainable valorization of archaeological heritage, such as the eco-archaeological parks, open-air museums and interpretation centres, living history programs, cultural routes and educational paths, as well as community digs and practical workshops as models of participatory heritage management which would involve the local community too through innovative creative tourism experiences.

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Chapter 6
The Innovative Health Tourism's Environmental Management Sustainable Design Facilities Assessment Capability

Tilemachos K. Koliopoulos and Vicky Katsoni

Abstract One important domain has been evolving along parallel pathways in tourism studies which is community-based tourism (CBT). This poses significant challenges to those interested in community health tourism and their building infrastructures, research and practice in the sustainable development design and environmental management facilities in the sector of health tourism. An assessment capability is taking place for project management, monitoring schemes and actions that promote innovation at Health Tourism's construction infrastructures to minimize outdoor pollution threats next to community health centers from brownfields (i.e. waste water units and associated sanitary units, landfills etc.). This paper is presenting an integrated framework based on a comprehensive and analysis of the community health centers and sustainable design facilities in health tourism related facilities. The study reveals not just common ground and differences that might be anticipated, but also important sustainability dimensions that are lagging or require much greater attention, such as environmental management, sustainable designs, monitoring and public health protection of tourists. A preliminary framework of "sustainable community-based tourism" (SCBT) is forwarded that attempts to provide innovative operational solutions in Health Tourism's facilities. Critical directions are presented making useful conclusions to progress research and development in sustainability-oriented practices towards more effective sustainable designs and operational management of tourism facilities in Greece and the surrounded Mediterranean region.

Keywords Sustainable tourism · ICTs · Technological innovation · Community-based tourism · Health tourism · Tourism marketing management

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T. K. Koliopoulos (✉)
Department of Community Health and Public Health, University of West Attica, Athens, Greece
e-mail: tilkolgr@gmail.com

V. Katsoni
Department of Tourism Management, University of West Attica, Athens, Greece

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1 Introduction

As technology and medical know-how dissolved to emerging market countries, a model should be taken into account of medical tourism's construction and monitoring facilities so as to serve an increasing number of patients from developed countries that have been travelling to medical centers of less developed countries in order to obtain certain medical services (Horowitz et al. 2007). It should be noted that in Greece Expects an Extra 2 Million Tourists in 2018, visiting it more tourists in mainland as well on islands according to Greek Tourism Minister Mrs. Elena Kountoura (Kathimerini 2018).

Therefore numerous factors should be taken into account for qualitative services in medical tourism and especially community health's environmental protection for medical tourists that will come in Greece. Moreover, good environmental project management activities that are supported by hotels to protect the public health of medical tourists during their vacation should be promoted in the medical tourism industry. The proper use of content analysis on Hotels' Websites as Communication Tools should be promoted presenting the environmental protection perspectives and sustainable designs of medical tourism facilities (Katsoni et al. 2012, 2013).

Medical tourism facilities that support proper environmental monitoring project management schemes for the qualitative vacations of medical tourists are becoming more competitive than other ones between the stakeholders. Any medical tourism's facility related information in terms of environmental protection that is presented in the web is good for the medical tourists to decide their safe and safe health tourism destination (Kotler et al. 2006; Leahy et al. 1995; Legido-Quigley et al. 2008; Lunt et al. 2012; Thelen and Travers 2007; Husband 2008).

Table 1 Focused targets in development of effective medical tourism's administration with web ICT's applications for medical tourist's public health protection

- Effective designs of infrastructres for public health protection, right decision making of accessible entrances, mobility and medical tourism's facility access;
- Risk assessment and monitoring schemes of outdoor and indoor environment with good air conditions, noise protection avoiding smoke and odors from any hazards from possible nearby polluted areas under reclamation i.e. landfill gas emissions and hazardous leachate toxic emissions;
- Support construction materials and innovative associative structural combinations in order to assist effective sustainable and safe building designs for public health protection;
- Provide equal access and flexibility facilities in emergencies to the particular health care unit's spaces between nursing staff, physicians and persons with MSD's;
- Support effective designs in associative tourism's facilities for energy recovery from biogas emissions and water resources economy from leachate treatment;
- Develop useful web utilities ICT's for medical tourist's and services in medical tourism's public health protection; g.i.s tools; sanitary drawings and right operational management for stakeholders in medical tourism facilities.

An integrated framework is needed for medical tourism facilities based on a comprehensive and analysis of the community health centers that is presented below. Sustainable design facilities in health tourism related infrastructures are promoting more medical tourism's facilities in terms of marketing for tourists. In this way are preferred more health tourism's construction facilities that present on their web sites that they support environmental project management, sustainable designs for the conformance of medical tourists and monitoring schemes. A preliminary framework of "sustainable community-based tourism" (SCBT) is forwarded that attempts to provide innovative operational solutions in Health Tourism's facilities presenting important sustainability dimensions that are lagging or require much greater attention, such as environmental management, sustainable designs, monitoring and public health protection of tourists.

The purpose of this study was to investigate the performance of a useful ICT utility in project management and monitoring scheme with stakeholders in health tourism industry that should be followed to solve associated environmental management problems in sustainable designs, sanitary engineering solutions and public health protection of medical tourists.

2 Medical Tourism Facilities' Operational Design Principles

Successful integration of ergonomic accessible communal design in medical tourism facilities into the whole health care operational process requires careful consideration of potentially life cycle goals for a sustainable project at its earliest stages. The design should be focused on sustainability of current land uses as well as future building expansions and mobility urban facilities in order to meet project challenges for people with MSD's. Nursing staff, physicians and patients should be in a health care communal unit that follows a construction design with new construction materials and associative innovations which are supporting operational sustainability, effective building systems in energy consumption, health and safety, safe pathways in emergencies, security in road zones and mobility for people with disabilities to access easily the particular facilities of a communal health center.

An effective sustainable design of a communal health care facility for people with MDS should identify potential locations that construction projects will support innovative combinations of construction materials successfully for all of the stakeholders. The latter fact could be realized by the good planning of access into and around the spaces within the health care facility focused on the next crucial construction design points (Koliopoulos and Koliopoulou 2007a, b; Koliopoulos and Koliopoulou 2006, Koliopoulos et al. 2003; Koliopoulos et al. 2016a, b; Babatsikou et al. 2017).

- Plan effective location of accessible entrances and medical tourism's facility access points around health care building facility positions in order to limit mobility travel distances for people with MSD's from site arrival points, public transportation stops, such as public sidewalks, and parking, to accessible building and facility entrances;
- Qualitative monitoring and risk assessment of outdoor and indoor environment with good air conditions and noise protection avoiding smoke and odors from any nearby hazards from possible nearby polluted areas under reclamation i.e. landfill gas emissions and hazardous toxic emissions etc.;
- Choose lighting options which accommodate MSD's people with low-vision;
- Support construction materials and innovative associative structural combinations in order to assist an effective bioclimatic design and to reduce health care building's energy consumption;
- Limit the need for travel between levels and the reliance on elevators and lifts, applying properly footbridges design for access to spaces within the health care facility;
- Apply lamps class A+ or A++ for lighting, using automations for lighting in late hours to switch off/on them and not in peak hours when nursing staff and physicians are working in the health care community unit;
- Design corridors and main operational spaces in medical tourisms' community health care facility units or in hospitals adjacent to community health care units that will have low noise in peak hours;
- Design and apply construction materials with good thermal conductivity in order to upgrade old or build new ones health care community units in terms of qualitative building energy consumption for heating, cooling and use of hot water;
- Utilize modern technology so as to consume natural gas; energy from biomass or other ecological devices in energy consumption for heating, cooling and use of hot water, avoiding greenhouse emissions and energy consumption from non-renewable resources;
- Utilize modern technology so as to apply for heating, cooling and use of hot water, avoiding greenhouse emissions and energy consumption from non-renewable resources;
- Utilize modern technology for heating radiators and place them in crucial locations in community health building units so as to provide optimum heat mass transfer;
- Provide equal access and flexibility facilities in emergencies to the particular health care unit's spaces between nursing staff, physicians and persons with MSD's.

Based on the above the main targets of the investigated framework for environmental and public health protection of medical tourists and environmental management stakeholders are presented below.

- Develop web portal on-line utilities for project management of water resources and environmental management technical works and facilities;
- Adoption the developed cost models in effective ICT's web applications (project management cost scenarios; effective management of web g.i.s applications; digital sanitary drawings; upload files; web on line visualization of results; metadata; on line guidelines and education for staff etc.);
- Learn from risk assessments and possible environmental problem scenarios from hazardous emissions to minimize environmental impacts and to protect medical tourists' public health, especially of elderly people and people with disabilities;
- Plan future perspectives based on particular medical tourists' necessities for better hotel's and community health operational administration.

An investigation took place in the Greek market for existing project management measures taken in extreme weather events and public health protection from pollutants and associated environmental hazards (Koliopoulos 2014). The results showed that is demanded a business project environmental management improvement, where was found that eighty (80%) of case studies presented delay in their business services due to extreme weather events or other environmental occupational hazards. Moreover, there was found that eighty five percent (85%) of case studies had not an existing confrontation plan to environmental hazards. Also there was found that sixty (60%) of case studies had not invested in new technology for environmental management and public health protection.

- Develop a friendly web application for the on line user as a useful operational management utility used by the staff of medical tourism infrastructures;
- The developed utility to be useful both for the employer; the trainer and the manager of a project in water resources and environmental management sector for public health protection of medical tourists;
- On line support in useful files for better project management (web g.i.s applications; digital maps; digital sanitary drawings support; other associated files, utilities; metadata etc.) (Fig. 1).

3 Results

Based on the above analysis was developed a useful proper ICT application for Project Management visualization supporting sanitary drawing utilities for better operational management, administration and public health protection of medical tourists in health tourism facilities.

Based on given environmental project management scenarios are developed KML files for uploads by google earth (The Google Earth software of satellite imaging 2018) as well as supported proper ACAD utility (Cottingham 2001) providing sanitary drawings for the right project management actions. These actions

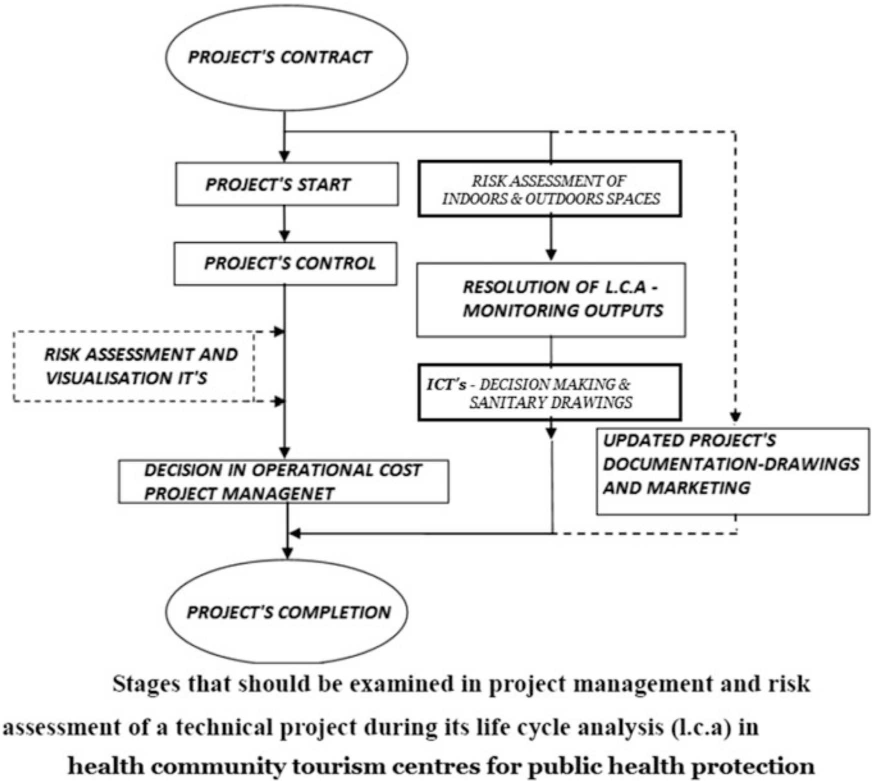

Fig. 1 Operational management framework for medical tourism's facilities and public health protection

should be taken by skilled staff at medical health tourism facilities. Hence, actions that should take place in time are minimizing the associated environmental impacts based on given environmental hazard scenarios. Indicative results are presented below i.e. pins for working points and delay comments in KML google earth's environment; digital sanitary drawings in ACAD VBA environment for retaining walls construction management; open canals maintenance project management for flood protection from debris peak flow rates; monitoring biogas pumping networks and associated sanitary infrastructure works (Fig. 2).

Periodic training is demanded for medical tourism's staff in new ICT technologies so as to protect public health from associated environmental hazards in outdoors and indoors spaces next to a health tourism facility from toxic and hazardous emissions i.e. landfill gas, odours, noise from explosions, treatment of leachate emissions, pipe network leakage, drinking water pollution, ground water pollution etc.

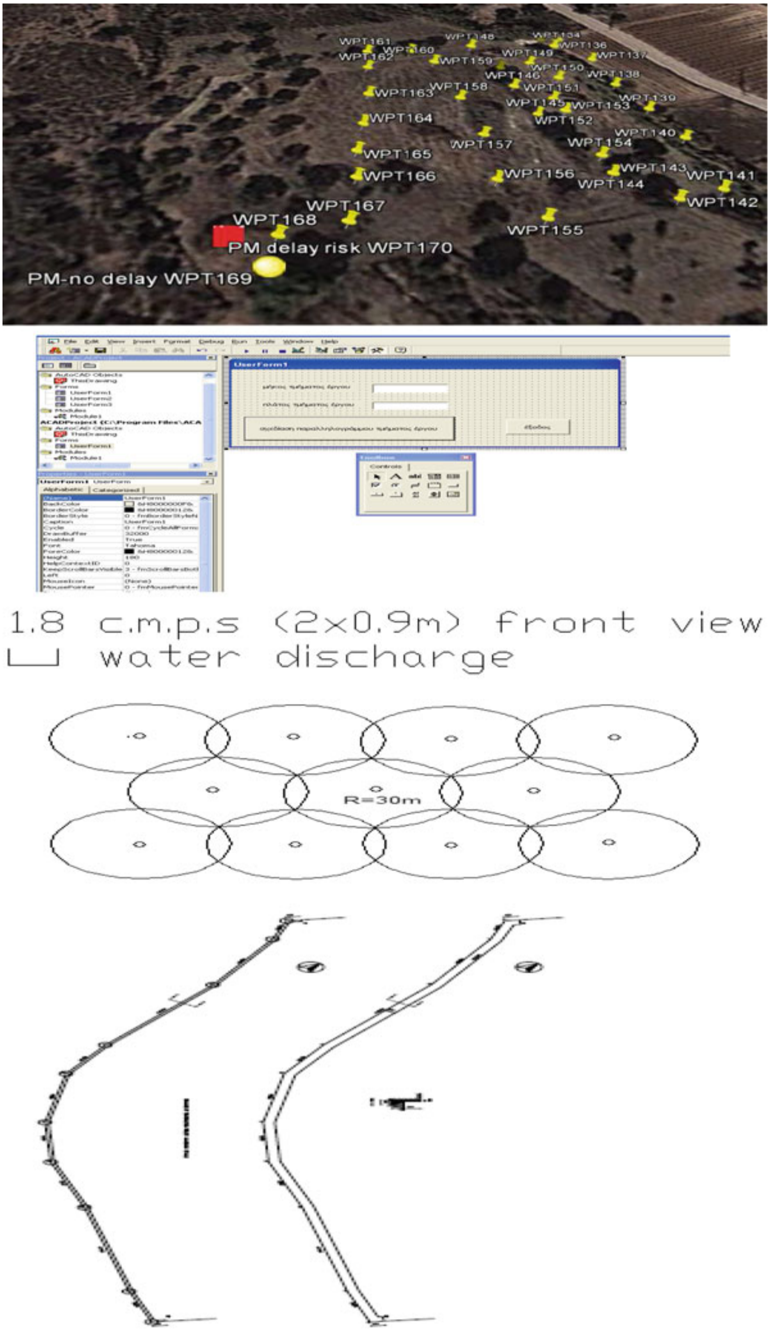

Fig. 2 Indicative project management scenarios for medical tourism's facilities and public health protection utilising KML and ACAD digital technologies

4 Conclusion

Training of the presented framework in medical tourism interesting parties is a key factor in increasing the share of medical tourism in the company's turnover and boosting staff skills. Moreover, the high level of staff training is expected to increase satisfaction to medical tourists in terms of their public health protection and improve the quality of the medical tourism services provided. High class hotels have the ability and the relevant infrastructure to develop it, provided that the whole ICT infrastructure integrates successfully in the operational management of medical tourism businesses. Network creation and cooperation among all relevant medical tourism stakeholders, public and private, is necessary, in order to coordinate efforts for the successful development of the presented framework.

Since, medical tourism has been prioritized in the political agenda and given that there is a positive willingness to invest in this field, it is obvious that further research is needed on their potential impact on the national economy. Moreover, medical tourism in Greece should take into account the above presented framework for public health of medical tourists so as to be promoted the applied environmental management and monitoring schemes in the web by hotels that could follow it. In this way medical tourism is becoming an important source of national income and consequently, an alternative for Greece to be created more jobs and exit the current economic crisis.

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Chapter 7
The Concept of Dichotomy of the Innovation Process in an Enterprise

Leszek Koziol and Michal Koziol

Abstract The article presents selected, more important definitions of innovation in an enterprise, paying attention to those of them which emphasize its immaterial character. It describes models of the innovation process, concepts of the innovativeness system and models of the innovative activity of a firm. It was found out that the elements of these objects are a coherent entirety. The principle of the presented research approach is the paradigm assigned to Schumpeter of merging various activities within the innovation process. It turned out, however, that an attempt to implement such a broad programme, namely the invention and the imitation of innovation, often ends in failure. The reason is that we cannot recognize the tools of analysis and define the determinants of the innovation process in the comprehensive Schumpeterian approach, however, we can resolve these issues by studying each fragment of this processes of innovative character. The aim of the article is to present the concept of the dichotomy of the innovation process in an enterprise and indicate the way of using it in practice. Two autonomous processes, crucial for the development of innovativeness, are distinguished in this concept, namely the process of innovation invention in its immaterial form and the process of innovation implementation which has got material and immaterial character. In the strategy of an organization it is necessary to define the object and the scope of analysis, at the same time considering the level of innovation ability of an enterprise; in a creative industry they may specialize in creating ideas, designing novelties and offering innovative projects to an appropriately selected target group. Traditional firms should develop and implement these projects in practice to the benefit of customers. It should be emphasized that the choice of the subject of innovative activity determines the innovation ability of the organization, the ability to manage innovative projects and the use of modern (agile) management methods, as well as management pragmatics. The article is of theoretical and empirical character. To achieve the aim and verify the theses, following research methods were used: literature analysis, impact factor analysis, professional conversations with experts.

L. Koziol (✉) · M. Koziol
Faculty of Management and Tourism, Malopolska School of Economics, Tarnow, Poland
e-mail: llozioll@interia.pl

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JEL Classification O 032

1 Introduction

The survival and development of enterprises in unstable environment requires unique competences of management staff and personnel, first of all in strategic effectiveness, operating effectiveness, project management and innovativeness skills. Innovativeness understood as the ability to create and implement innovations is a contemporary method of manufacturing new products in a better or changed way, method of improving processes and relationships, method of achieving the strategic and operational goals of an organization (Fig. 1).

An innovative business model defines the catalogue of projects and goals constituting the overall strategy of an enterprise. The strategy implementation justifies undertaking restructuring and innovative activities, uses the project management method, as well as supervision and control instruments. The creation of innovation model can be used in the organization's business activities for the development of knowledge and innovation as well as raising its competitiveness.

The aim of the article is to present the concept of the dichotomy of the innovation process in an enterprise and presentation of the results of empirical research. The study has been created as an attempt to show the author's concept of creating and implementing innovations.

The following theses were adopted in the presented concept: innovation process, regardless of the type of innovation, can be approached twofold, namely as the process of invention of innovation and the process of implementation of innovation. The determinants of both processes and research instruments are totally different, nevertheless, in numerous innovation models it constituted a coherent whole: from

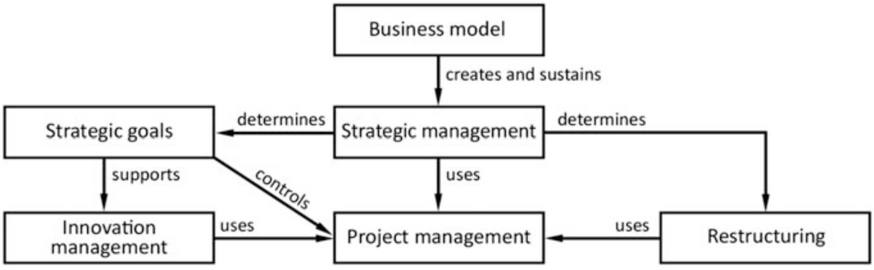

Fig. 1 The structure of project and innovation management in an organization. *Source* Author's own elaboration

invention to innovation and to imitation of innovation, which remarkably complicates practical implementation of this pattern.

In its strategy an enterprise can define the subject and scope of innovative activity according to the possessed innovation ability, as well as project abilities to dynamize and steer innovation activity. It has been assumed that innovation can constitute both a complete innovation process and a part of this process that has an innovative character.

As a thesis it was also assumed that the method of evaluating innovation ability of an enterprise is an effective instrument of identification of competences and the level of knowledge of the management staff and employees with regard to innovativeness. The analysis of the level of knowledge, therefore the awareness and motivation of employees within the mentioned scope, influences the effectiveness of innovation process.

The article is of theoretical and empirical character. To achieve the aim and verify the theses, the following research methods were used: literature analysis, impact factor analysis, expert research and questionnaire method, professional conversations with experts, conversations with managers regarding pragmatics of innovation management in an enterprise.

2 Around the Term of Innovation in an Organization

Innovation, in its essence, is variously understood and defined. In already numerous and broad literature there are a lot of different definitions and interpretations of the term ‘innovation’. In majority of them the balance point of analyzing this issue is basically put on the identification of various types of innovations, determinants of this phenomenon, both material and immaterial ones, its designates and dimensions, positive and negative effects calculated in a long and short term. The term is associated with modernization, improvement, novelty or an original solution, an idea, a new conception, an invention, a design.

Numerous authors draw attention to the problem with defining the phenomenon of innovativeness. They emphasize that the precise definition of terms related to innovation, such as type of innovation, innovation process, innovation system, innovative activity, innovation management, influences the substantive and methodological aspects of investigating this phenomenon, including the subject and the scope of the study, the way of conducting the analysis, interpretation of the results, and finally the innovativeness and effectiveness of enterprises.

In the literature we can find various approaches to investigating the innovation process in an enterprise. Referring to a well-known concept of the innovation process attributed to Joseph Schumpeter, expressing three elements of this process as ‘Invention—Innovation—Imitation’, some authors who deal with this issue indicate the key meaning of a selected element of the process, others emphasize the unity of the process thus divided. Some researchers treat invention as the whole innovation process, whereas others refer innovation to the practical application of a new idea, its market diffusion, they expose the process of the imitation of innovation (Howells 2005 p. 1).

Practitioners having a lot of knowledge about innovation management in an enterprise highlight the meaning of the context of innovation commercialization. Many of them understand and treat innovation as a process of offering new products, processes and experiences to customers on the one hand, and measurable benefits to the firm on the other hand.[1]

The most numerous group is made of authors who understand innovation as activities related to the creation of an idea and its commercialization, in other words —they include in their research both the process of invention, innovation and the process of implementation of invention, they indicate its material and immaterial character. In this stream there are definitions of innovation developed by well-known authors, such as: Joseph Schumpeter, Peter F. Drucker, Michael E. Porter, Philip Kotler, Ricky W. Griffin or *Oslo Manual*.[2]

A considerably smaller number of researchers emphasize that innovation in its essence is immaterial, it constitutes its new element, object, project based on knowledge and creativity. Such a point of view is represented by, among others: Simon Kuznets, Percy Whitfield, Robert E. Lucas, Everett M. Rogers.[3]

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[1]For example, Jeffrey Baumgartner believes that innovation is the 'implementation of creative ideas in order to generate value, usually through increased revenues, reduced costs or both'. On the other hand, Mike Shipulski claims that it is a 'work that delivers new goodness to new customers in new markets, and does it in a way that radically improves the profitability equation'. Kevin Mc Farthing defines innovation as the 'introduction of new products and services that add value to the organization'. Gijsvan Wulfen defines innovation as a 'feasible relevant offering such as product, service, process or experience with a viable business model that is perceived as new and is adopted by customers' (all definitions see: Skillicorn 2016).

[2]According to J. Schumpeter, innovation is the establishment of new products, new methods or semi-finished goods (Schumpeter 1939, p. 84). P.F. Drucker regards innovation a special tool in entrepreneurs' hands, which is interpreted as an ability to launch new business activity or to offer a different package of services to customers (Drucker 1992, pp. 40–45). In M. E. Porter's view, innovation is a technological improvement related to more effective and efficient fulfilment of goals (with the use of marketing and management knowledge) (Porter 1990, p. 45). On the other hand, R. W. Griffin claims that it is every organizational effort whose aim is to launch new goods to the market (Griffin 2004, p. 424). In *Oslo Manual* it is assumed that innovation means the invention and then the implementation of a new method, process, product, instrument, or other business activity of a market character, organization of work or a relation with external environment (*Oslo Manual*, 2008). In P. Kotler's opinion, an innovative project—whether it will be new products, services, processes or business models—upon implementation will give specific, both positive and negative results (Trias de Bes and Kotler 2013, p. XVI).

[3]S. Kuznets believes that innovation is the application of new knowledge towards an invention (Kuznets 1959, p. 30). According to P. Whitfield, innovation is knowledge and creativity building a new element (Whitfield 1979, pp. 14–15). R. Lucas ascertains that innovation is the accumulation of human capital translated into economic growth (Lucas 1988, pp. 5–7). In E. M. Rogers's view, innovation includes all areas which through subjective feelings are recorded and assessed as a novelty, regardless of a real level of novelty of the said object or thought (Rogers 2003, p. 12).

In the content of the definitions given we can distinguish at least three approaches to the description of the essence of innovation. The article adopts two approaches: the narrow and the broad one.

In the narrow approach innovation is a cognitive process of creating and developing ideas, concepts, projects—basing on knowledge and creativity—which are called novelty, a new element by the creator or recipient, the target group. Innovation (creativity) in this approach can be identified through the evaluation of the expected results, or the evaluation of the quality of innovative projects. In this sense, innovation refers to every object which takes the immaterial form, e.g. an idea, a new method, an innovative design. Creativity is understood here as the quality of an object (concept, project) and not the trait of the man, the creator. (Bartol and Martin 1991, p. 281).

In the broad approach, innovation is any, in principle beneficial, creative and original change in various areas of an organization's activity, bringing novelty and progress in comparison with the existing state assessed positively in the light of the effectiveness criteria of a given organization (Kozioł et al. 2017).

3 The Unity of the Divided Process

The presented definitions have been developed and expanded in numerous models of the innovation process, concepts of innovativeness system presented in literature or in developed models of the innovative activity of enterprises. Examples of selected solutions concerning innovativeness of enterprises are presented in subsequent Figs. 2 and 3.

The model of progression of innovation process is the development and expansion of Schumpeter's innovation process system, particularly in the diffusion (dissemination) part of innovation. The components of this part (stages of the process) as a result of mutual influences are a coherent wholeness. However, a complex, difficult stage of the process of invention of innovation which was called 'an idea' was presented very briefly, without an attempt of its operationalization. What is more, the stage (sub-stage) of the evaluation of the innovative project in the pre-implementation stage is also missing.

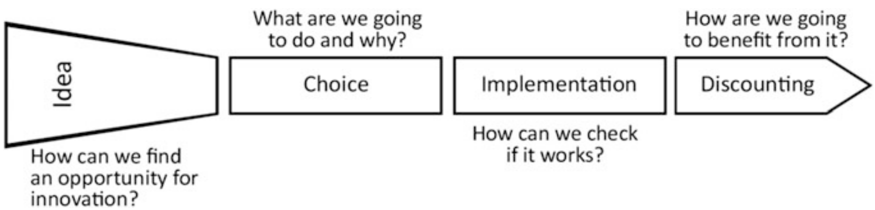

Fig. 2 The progression of innovation process. *Source* Author's own elaboration based on: Tidd and Bessant 2013, p. 89

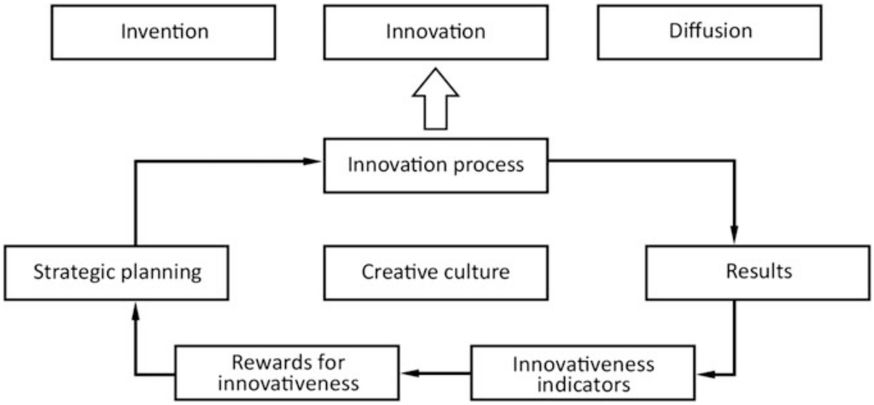

Fig. 3 Complete innovativeness process. *Source* Author's own elaboration based on: Trías de Bes and Kotler 2013, pp. XV–XVII

Presented above innovativeness system includes two subsystems: innovation process in the traditional, classical approach and the innovation management process. It emphasizes the significance of strategy and strategic planning, monitoring and operating control, motivation for innovative activities and organizational culture constituting the context of the system (Fig. 3). Inclusion of innovative activity in the implementation of strategic goals of an organization is really justified, however, innovativeness with regard to operating effectiveness, important from the point of view of productivity and competitiveness of an organization, should not be limited.

According to the authors of the innovation process model comprising six types of integrated activities (steps), the reason for limiting innovativeness, already at the beginning of the process, is the type of managers' activities. They mainly concentrate on solving current problems, they attach less importance to finding opportunities for its development, especially ideas, innovative projects increasing competitiveness. Presentation of the proposals of an innovative process solution with the provision of the plan of its implementation decreases the resistance of various groups of interest to innovation and improves its completion. Detailed proposals included in the model aim at improving the innovation process as a whole. However, they do not contain internally coherent parts of the innovation process that could be successfully implemented in practice.

The extension of the innovation process which goes further is presented by Pauric McGowan (1997) and Amabile (1983). Twelve stages of this process create the algorithm of the procedure similar to the decision making process model, more broadly to solving problems in an organization. The proposed procedure may also turn out to be not useful in the innovation management process in an organization. The described process models are insufficient to increase the implementation effectiveness of innovations.

The quoted definitions of innovation and other notions and terms with respect to the innovativeness of an organization according to their authors are understood as systems, objects, whose components, as a result of mutual influences, constitute a coherent wholeness. A general principle for the presented research attitude is the paradigm of uniting various activities (stages) within the innovation process and establishing the evaluation of an innovative project at the stage of its choice and commercialization. It is assumed that the subject of implemented undertakings is not a particular stage of the innovation process but all the activities related to it.

4 Dichotomy of the Innovation Process—An Outline of the Concept

The innovation process, regardless of the character and type of innovation and the way of its emergence, includes two stages, two autonomous processes:

The process of innovation invention, consisting of the stage of creating the first concept, a draft concept (an innovative project concept emerges),[4] the stage of the materializing the idea (parametrization of the innovativeness process), and of the stage of idea evaluation (the evaluation of innovative project in pre-diffusion stage). The ex-ante evaluation of innovative project is performed, among others, in the context of the project feasibility, and then its functionality and effectiveness.

The process of innovation implementation, comprising the stage of the concept selection, namely the innovative project and implementation method, that is the control over the implementation of the innovative project function and the stage of discounting value from the implemented idea, namely the interception of value from the innovative project (see Fig. 4).

An innovative project in the stage of the process of innovation implementation differs significantly from the project emerged in the stage of innovation imitation. In particular, they differ in identification of problems and defining goals, the approach to creating and using ideas (innovation), the level of use of the possessed resources and designing technologies, competences of designers, the level of risk, time and budget for implementation, or the project business value.

Innovation invention projects have vaguely defined goals and the ways of their implementation. It sometimes happens that they are implemented according to the principle that the solution is known but the goal and the application of the project are not defined precisely. The budget is not specified and the time of the project is

[4]A significant element of the analysis is the use of project management idea in innovative activity—constituting a value for an enterprise. The notion differs from traditional ventures in terms of the dynamics of progression and the rate of the benefits achieved. According to some researchers, an innovative project is not precisely defined in literature, it can be defined as invention of innovation, an idea, a draft of something. A project is also an intended plan of action, a concept, an initial schedule, a programme. Its uniqueness concerns not only the way of implementation, but also products or benefits which may arise in its effect (Duncan, 1995, p. 4).

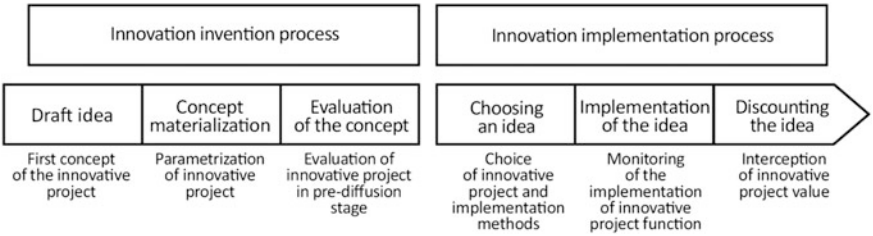

Fig. 4 Two-dimensional progression of innovation process. *Source* Author's own elaboration

not defined, and the predicted benefits are uncertain. This type of projects occur unexpectedly and they are an opportunity for an enterprise (Kelley and Littman 2009, p. 3), they are an innovation that takes on an intangible form (see the definition of innovation in a narrow sense).

On the other hand, the goals of innovation implementation projects most often arise from the strategy of an enterprise. Their financial budget, the time of implementation and, which is the most important, the business value are defined relatively precisely. In their essence, projects of implementation (commercialization) of innovation are similar to the class of agile projects (Agile Project Management), which are in the range between standard, and extreme projects are implemented according to the plan (Wysocki 2013, p. 390; Kozioł and Ćwiertniak, 2018, p. 186). They usually take on a material form, less often intangible (see the definition of innovations in a broad sense). In short, in the innovation inventiveness process unique skills of the creators and motivation of the researcher's learning and achievements are indispensable, while in the process of innovation implementation these requirements relate to managerial abilities and skills, material motivation and promotion.

The differentiation between both types of projects also concerns the competences of designers. In an innovation invention project creativity and talent as well as divergent thinking are of key significance, whereas in an implementation of innovation project these are entrepreneurship and competences with regard to innovative project management or convergent thinking.

In such an approach entrepreneurship is understood as recognition, evaluation, refining and use of an innovative project.

As it was mentioned, in this stage it is necessary to perform the evaluation of the innovative project with particular consideration to the limitation of the project feasibility, the situation of the organization, the level of its functionality and effectiveness in the short and long term.[5]

[5]A helpful tool for evaluating an innovative project is the NASA (National Aeronautics and Space Administration) preparedness method. With this method, you can define and evaluate an idea from the conceptualization phase of a solution to the stage of its maturity, in which the idea takes the form of a solution that can be applied in practice (Mankins 1995, p. 5).

The commercialization of an innovative project requires competences in project management, the use of modern (agile) management methods so that one could implement subsequent stages of this process.

Among numerous attributes of a creative idea (innovative project) preferred by managers and entrepreneurs the following are mentioned: the achievement of competitive advantage, the inception of value from innovation, the adjustment to the existing business model, as well as originality and flexibility, namely the possibility to refine and develop the idea (Gruber et al. 2015, pp. 205–225). M. Holmes, T. R. Holcomb, P. G. Klein, R. D. Ireland presented the sequential model of judgments made by entrepreneurs, which considers four criteria (Holmes et al. 2013): ideation, profitability, desirability and activity. The model explains how an entrepreneur evaluates the project, starting with evaluation of a creative idea and ending in evaluation of the venture implementation.

As it can be observed, the determinants of both the processes and research instruments are considerably different. Also the competences of the designers and the products of their work are dissimilar. In the process of invention of innovation it is a unique idea communicated to the firm in which it emerged or the environment of the organization. Implemented in the process of the implementation of innovation, it creates value for the project buyer, it becomes his intellectual property. In fact, at least two innovative projects are being created (two innovations) that can be implemented in a different place and time.

Scientific and research institutes, universities, authors of software, planning and design companies, advertizing agencies, or R&D units functioning in corporations, and even single positions of authors constitute the creative industry with high dynamics of creating (producing) innovative projects. Offered within the industry or outside it they bring benefits to project authors.

In its innovation strategy an enterprise can choose a broad range of innovative activity, including both the process of invention of innovation and the process of the implementation of innovation. However, it requires the extension of innovation potential and ability,[6] necessary for implementation of both processes and their fragments at the same time. High costs and high risk of the venture are the reason for which only few organizations can afford it due to financial reasons, material resources, competences and others.

The majority of enterprises, especially those which belong to small and medium-sized enterprises assume in their strategy the development of innovation ability in the area of implementation of innovation. An innovative organization of this type has the capability of identifying and taking over innovative projects, ideas

[6]The effectiveness of an enterprise with regard to creating innovation is determined by resources developed in the past (innovative potential), as well as appropriate skills and capabilities of their current use. Innovation, which should be emphasized, must be coherent with the strategy of the organization and originate from it. In this way the organization expresses its readiness to introduce innovation and defines the methods of implementing innovation. In other words, innovation ability is the ability to apply the act of creativity of new ideas, inventions, which results in innovation whose diffusion brings benefits to the enterprise (Koziol et al. 2017).

from its environment, adjusting and developing a project, commercializing and incepting value from innovation. It has resources and capabilities to discover and make use of opportunities to develop new products and processes in order to meet market needs (Hogan et al. 2011).

Some enterprises implementing innovation also attempt to get involved in the process of creating innovation, especially those which function in the innovative environment. They create alliances of knowledge, networks of inventions (Tödtling et al. 2009), bases of knowledge, various forms of knowledge exchange, for example ‘Edu-Time’, undertake cooperation in innovation creation (co-innovation) (Bonney 2012). The last of the mentioned activities, co-innovation, consists in joined creation of innovation to build common values and increase the level of competitiveness. The basis, the creative determinant of co-innovation is the use of IT instruments, particularly e-learning. These instruments, in an significant and purposeful manner, stimulate the flow of knowledge between the concerned entities. They can take on other organizational forms, for example they can be a set of independent, in the legal sense, business units, implementing various projects and projects coordinated by a company—an integrator which has distinctive, unique competences.

In this process, the so-called management pragmatics is particularly useful. According to interviewees—i.e. managers—Polish enterprises are developing innovative activities, introducing beneficial changes within the stage (stages) of the innovation process, using for this purpose external sources of knowledge, experience of international enterprises in particular.

5 Identification of Innovations Implemented in Tourism Enterprises—Case Study

The aim of the analysis presented in this part of the article is to evaluate the innovative activity of enterprises, with particular attention to the number and type of introduced innovations. In the course of the analytical work, cooperation was established within three hotels and three travel agencies. The results of these analyses are presented in Table 1, where are presented the characteristics of enterprises, while Table 2 describes their innovative activity.

Table 1 General characteristics of the enterprises

Specification	Hotels	Travel agencies
Employment	50–100	10–20
Przychody	3–15 mln Euro	1–3 mln Euro
Scope of operation	Regional, international	International
Assessment of financial condition	Good	Good

Source Author’s own elaboration

Table 2 Innovative activity of enterprises

Specification	Hotels	Travel agencies
Number of innovations implemented in the last three years	4	6
Type of implemented innovations	2 product 1 marketing 1 organizational	1 product 3 marketing 2 organizational
Is there a relation between the level of innovative activity and the achieved results, in the short and long term perspective, taking into account the productivity? Yes/No	Yes	No
Do you evaluate innovative projects in the pre-implementation phase? Yes/No	Yes	No
What methods do you use to evaluate innovative projects?	The amount of profit after implementation of innovation	The amount of profit after implementation of innovation The customer satisfaction

Source Author's own elaboration

With the reference to numerous classifications of innovations the Oslo Manual Methodology was chosen as it distinguishes product, process, organizational and marketing innovations.

In the period covered by the study, i.e. in the years 2015–2017, four marketing innovations, three process innovations and three product innovations were implemented in enterprises. In particular, they concerned: creation of the key clients databases, development and implementation of a new way of promoting and advertising foreign tourist trips, the use of social media in marketing activities, experimental implementation of a flat organizational structure limiting the number of organizational units and posts, creation of the trade fair and congress industry as a new form of tourism product, creation and promotion.

As can be noticed, mainly innovations in the product, marketing and organizational process, were dominating, improving, imitating, being a part of the classic innovation process, bringing measurable benefits to the analyzed companies and their customers.

6 Final Remarks and Conclusions

The main conclusion that can be drawn from the conducted analysis is that from the perspective of time some of the authors' views and presented models have become obsolete. The presented theory of innovation and so-called 'innovation triad' as the description of the process from invention through innovation to imitation—the process presented at a high level of generality, homogeneity, low disjunctiveness, treated as a field of analysis, the subject of the research of numerous authors. It appeared, however, that an attempt to invent and apply innovation often ends in failure since we still cannot explain what premises, cultural and economic stimuli, the way of implementation of innovative projects, reactions of the markets generate changes conditioning the diffusion of a new product or service.

We cannot recognize the tools of analysis and define the determinants of innovation process in the comprehensive Schumpeterian approach, but we can resolve it by studying each of these processes separately. Therefore, we can discuss the aggregate (holistic) approach to the innovation process as well as partial approach towards it, which constitutes the fragment of the innovation process. Both processes were presented in the concept of innovation process and in the practice of innovative activity of the analyzed hotels and travel agencies. Management pragmatics is a factor supporting innovation process. Organizations lacking sufficient resources did not invest in the sphere of research and development (basic, applied development works), but instead they tried to use external sources of knowledge, where the costs of innovative projects and the risk of failure are much smaller than in the case of conducting own research.

It is in the strategy of an organization that the object and the scope of the analysis must be defined, considering the level of innovation ability of an enterprise, in the creative industry they can specialize in creating ideas, designing novelties and offering innovative projects to properly selected target group. Traditional firms should develop these projects and implement them in practice with benefits for their customers.

As we can observe, the choice of the object and the scope of innovative activity determine innovation ability of an organization, the ability to manage innovative projects and the use of modern (agile) management methods, as well as innovation policy supported by management pragmatics.

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Chapter 8
Value Creation in Service Over the Last Two Decades: A Meta-Analysis

Abdelouahab El Boukhari, Rachid Oumlil and Allal Achaba

Abstract During the last two decades, value creation has been considered as a central topic for discussion. Various studies have focused on variables that affect the value creation process, such as service quality and customer satisfaction. Others have emphasized the measure of the value created. However, the literature is still not fully articulated and the measurement systems are traditional. Accordingly, we conducted a meta-analysis of value creation in service by addressing the following questions: What is value creation? What are the indicators mobilized in value creation literature in service? This literature review covers a period from 1996 to 2017. The objective of this study is to provide a better understanding of value creation, as well as to conceptualize this concept in service based on the commonly cited indicators.

Keywords Value creation · Value co-creation · Value in use · Value in exchange · Service sectors · Indicators

JEL Classification M31 marketing

1 Introduction

With accelerated technological innovation in digital networking, managers must find creative strategies to distinguish from their competitors, increase customer loyalty, and launch new services to satisfy customers who are more and more demanding. This new conjuncture invites companies to find new ways to create value, which is the basic strategic goal over time.

During the last two decades, hundreds of published papers have studied value creation in several sectors. However, this subject is considered complex due to its subjectivity, the multitude levels of analysis (Xie et al. 2016), and the different

A. El Boukhari (✉) · R. Oumlil · A. Achaba
ENCG Agadir, Ibn Zohr University, Agadir, Morocco
e-mail: elboukhari@hotmail.fr

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actors involved. The customer has an important contribution to creating value for the firm, which makes him the center of this process (Lepak et al. 2007). Moreover, other participants play also a main role in value creation, such as public administrations, employees, residents, and suppliers (Navarro et al. 2014).

Accordingly, we conducted a meta-analysis of value creation in service by addressing the following questions: What is value creation? What are the indicators mobilized in value creation literature in service? This literature review covers a period from 1996 to 2017. The objective of this study is to provide a better understanding of value creation, as well as to conceptualize this concept in service based on the commonly cited indicators.

This paper is structured as follows. The theoretical framework for the study is presented in the following chapter. The study then describes the methodology of our review. Afterwards, we present the outputs of our review in terms of the indicators in use. The paper concludes with a summary of the main findings, directions for future research, and limitations of the study.

2 Literature Review

2.1 A Definition of Value

The debate on value had lead scholars over time to define the concept. Zeithaml (1988), through an exploratory study, stated that people used the term value in four ways, which represent four definitions of the concept:

- "Value is low price", which means that low prices are a determinant for people's purchasing of products and services.
- "Value is whatever I want in a product". This definition indicates that among the most important components of value are the benefits derived from the purchase of a product or service.
- "Value is the quality I get for the price I pay". This definition represents a comparison between the quality and the price of the products or services.
- "Value is what I get for what I give", which conceptualizes value as a balance between the given and the received components. According to Zeithaml (1988), the value can be defined as an evaluation by the consumer of the utility of a product based on the given and received perceptions.

Although other definitions have enriched the literature of value. According to Monroe (1990), the buyers' perceptions of value represent a tradeoff between the quality or benefits they perceive in the product relative to the sacrifice they make by paying the price.

2.2 Value in Use and Value in Exchange

A distinction has to be made between value in use and value in exchange. Furthermore, Marx has developed the theory of value, according to which every commodity possesses a value in exchange and a value in use. The latter is the concrete utility of the product. It is given by the nature and quantity of the commodity. The value in exchange is a property of the commodity that allows it to be compared with other goods on the market for exchange. In addition, classical economists have defined the value in use as the customers' perceptions of the usefulness of a product, whereas the value in exchange is the amount of money the customer is ready to pay in exchange of the perceived value in use (Bowman and Ambrosini 2000).

2.3 Utilitarian Value, Hedonic Value, and Social Value

In last decades, the customer value has been considered as a multidimensional concept, which includes a utilitarian (functional) aspect, a hedonic (emotional) aspect, and a social aspect. Sheth and Uslay (2007) define functional value as the perceived utility derived from an alternative's capacity for functional, utilitarian or physical performance. The hedonic value refers to emotions and views the customer as more than just a thinker but also a feeler and doer (Roeffen and Scholl-Grissemann 2016). The hedonic value is more subjective and personal than its utilitarian counterpart and results in more from fun and playfulness than from task completion (Holbrook and Hirschman 1982). Finally, The social value emanates from a mindset which is shared by a society and determined by the social impact that the purchase of service constitutes (Sánchez et al. 2006).

2.4 Service-Dominant Logic and Good-Dominant Logic

The study of value has been based on different approaches. The most important ones are the good-dominant logic and the service-dominant logic. According to Vargo et al. (2008), in the good-dominant logic, the manufacturing and distribution of products is the primary objective of any company. Thus, the production process uses resources to embed value into products and this value will be exchanged by the market price or what the consumer is ready to pay. The S-D logic focuses rather on operant resources, such as knowledge and skills. This approach emphasizes that service is the fundamental component of economic exchange (Xie et al. 2016).

2.5 Value Creation and Value Co-creation

After discussing the difference between value in use and value in exchange, the dimensions of value and the basic related approaches, the questions that arise then are who creates value? And who co-creates it? (Grönroos 2008). Joppe and Li (2016) have explained that the involvement of customers in the process of value creation is essential to services. According to Vargo et al. (2008), the customers are always co-creators of value. However, when value in use is understood as a crucial value creation concept that is created in customers' value generating, and if the value in exchange is dependent on the developed value in use, customers have to be the value creators and suppliers can be called value facilitators (Grönroos 2008).

3 Methodology

The aim of this study is to review value creation in service. Consequently, we addressed two basic questions: (1) what is value creation? And (2) what are the commonly cited indicators in service value creation literature?

3.1 Sample Selection

Firstly, we identified the sectors concerned by our research, which are banking, e-commerce, insurance, public services, telecommunications, tourism, and transportation.

Article selection is based on two parameters: the first parameter is specific keywords, which are value creation, value co-creation, value capture, and performance. The second parameter is time scale, which covers the period from 1996 to 2017 inclusive. Only journals in English were included in the sample. The articles collection was conducted following three channels: citations tracking, key journals, key databases research (Jstor, Science Direct, Springer, Emerald Insight, Taylor Francis Online, Inderscience Online, Informs PubsOnline, Sage Journals, Wiley Online Library).

We have collected 300 articles. 26 articles that mention neither an independent indicator nor a dependent one, were eliminated from the sample. The final sample includes 274 articles. Table 1 exhibits the dispersion of articles by databases. It is found that 219 articles are published in ScienceDirect, which represents 80% of the sample.

Table 2 presents the top 25 journals based on the number of articles processed in our sample. On the top list are ranked two tourism journals with 46 papers (Tourism Management and International Journal of Hospitality Management) followed by a journal in finance with 18 papers (Journal of Banking & Finance).

Table 1 Number of articles by databases

Databases	1996–1998	1999–2001	2002–2004	2005–2007	2008–2010	2011–2013	2014–2017	Total
ScienceDirect	8	9	15	35	38	48	66	219
Emerald insight	–	2	1	3	–	2	4	12
Sage Journals	–	–	–	1	1	5	5	12
Taylor Francis Online	–	–	–	1	4	6	–	11
Springer	–	1	1	1	–	2	4	9
Jstor	–	–	–	1	1	1	1	4
Wiley Online Library	–	1	–	–	–	1	2	4
Inderscience Online	–	–	–	–	–	1	–	1
Indian Research Journals	–	–	–	–	–	1	–	1
INFORMS PubsOnline	–	–	–	–	–	–	1	1

Figure 1 shows that the literature of value creation is emerging from 1996 to 2017 as the context changes. The last slice (2013–2017) includes 30% of the sample while the first slice (1996–2000) includes only 3%. The growth in the number of articles reflects the growing interest in value creation in service in general and in tourism in particular.

3.2 Data Processing

After gathering 274 articles that met the sample selection criteria, data processing was performed mobilizing Nvivo 11. We started by analyzing the outputs in terms of approaches, journals, and databases. Then, we analyzed the key findings and the indicators in use. Thus, we could collect 1330 cited indicators in value creation literature in service. These indicators have been processed in three stages. The first stage consists of combining indicators that have the same meaning but spelled differently. The second stage emphasizes on indicators that are mentioned in more than one sector in order to retain only common indicators. In the third stage, we focused on independent indicators and we tried to classify them into 16 categories in order to provide a concise and clear view of value creation in service.

Table 2 Top 25 journals

Journals	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
TM										2	1	2	1	4	2		3	5		3	3		26
IJHM	1			2							3			1	1	1	2	4	3	1	1		20
JBF	1							1	1	2	1	3	1	2	2	1		2		1			18
EJOR		3			1		1	1				2	1		2		1			1			13
IJCHM					1	1				1	1							1	3				8
PSBS															1	2		2	1	1	1		8
JBR														2					1	2	2		7
PEF																	1		2	3	1		7
TP							1		1								1	1	1		1		6
O														1	1	1			2				5
GP										2					1		1			1			5
IJMS				2				1			1							1					5
TR																1			1	3			5
HR							1			2		1											4
MAR								1									1	2					4
SIJ											1			1		1	1						4
ATM				1						1								1					3
CHQ														1				1	1				3
CPA															1			1		1			3
EMJ											1	1		1									3
IMM								1									1					1	3
JIFMIM															1			1	1				3
JRCS										1											2		3
JTR										1						1			1				3

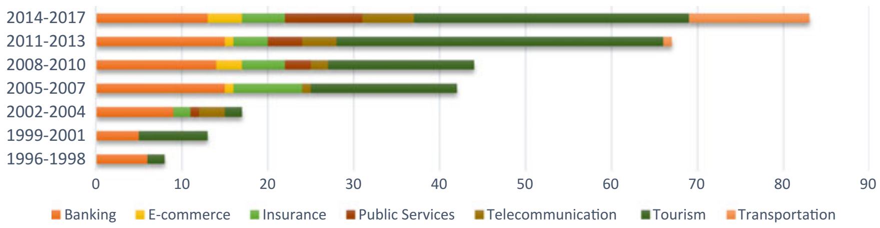


Fig. 1 Articles by slices of time (Color figure online)

4 Results

4.1 *Approaches*

Value creation is a topic that has been studied based on different approaches. Table 3 provides a list of top ten approaches mostly used in value creation literature and which represent 84% of the sample.

The case study is an approach that consists of elaborating hypotheses based on a theoretical background, then authors have to bring empirical evidence to confirm or not those hypotheses. It is used in 125 articles, which represents 46% of the sample. Furthermore, this approach can be combined with other approaches such as the Data Envelopment Analysis (DEA), which is the second frequently used approach.

The DEA was first proposed by Charnes et al. (1994) and it has become well-known and widely useful in management science (Liu and Tone 2008). It has been developed to study the efficiency of various units, called Decisions Making Units (or DMUs) (Perrigot et al. 2009). Some authors have combined the DEA with other approaches to overcome the DEA limitations such as Principal Components Analysis (PCA) (Bruce Ho and Dash Wu 2009) and Total Factor Productivity (TFP) (Tsionas et al. 2003).

The stochastic frontier is an approach that focuses also on measuring efficiency. According to (Chen 2007), efficient units are functioning on the cost frontier or on the production frontier, while inefficient ones operate either below the frontier or above the frontier.

4.2 *Words Cloud*

As it is mentioned in the methodology section, the indicators processing has been done through three stages. Figure 2 provides an idea about the frequency of all indicators in use in value creation literature. Furthermore, the most frequent indicators at this stage are related to employees, such as employees training, and customers, such as customers' satisfaction and loyalty.

Table 3 Top 10 approaches

Approaches	Banking	E-commerce	Insurance	Public services	Telecom.	Tourism	Transport.	Total
Case study approach	21	5	6	8	9	72	4	125
Data Envelopment Analysis (DEA)	24	1	9	–	3	12	6	55
Stochastic frontier approach	6	1	3	–	–	2	–	12
Balanced Scorecard Approach (BSC)	1	1	–	1	–	7	–	10
Service Dominant Logic (SD Logic)	–	–	–	–	–	9	–	9
Theoretical construct	1	–	–	2	1	1	1	6
Malmquist factor productivity change	3	–	1	–	–	–	1	5
Economic value added approach	2	–	1	–	–	1	–	4
Data Envelopment Analysis (DEA) and Principal Components Analysis (PCA)	2	–	–	–	–	–	–	2
Sustainable value approach	1	–	–	–	–	1	–	2
Total	61	8	20	11	13	105	12	230

Fig. 2 Words cloud of indicators at the first stage

Fig. 3 Words cloud of indicators at the 2nd stage

Figure 3 emphasizes on indicators that are common to two sectors or more. At this stage, the most frequent indicators, according to the words cloud, are rather financial as profitability.

4.3 Indicators in Use

Table 4 exhibits the top ten common indicators. As it is found in the previous section, profitability (Avkiran and Morita 2010; Peiró-Signes et al. 2014; Phillips and Louvieris 2005; Radić 2015; Zhou et al. 2009) is the most frequent indicator but the third common one. It can be affected by many variables, either in a positive way or in a negative way, such as human resources management (Chand 2010), price dispersion (Kim et al. 2014), Business agglomeration (Marco-Lajara 2014), innovation (Tajeddini and Trueman 2012), and location (Lado-Sestayo et al. 2016). Moreover, as this indicator represents a metric to measure the performance of companies, it is considered in our study as a dependent variable of the value creation process.

The first common indicator is costs (Barros and Alves 2004; Nurboja and Košak 2017; Radić 2015; Stahl et al. 2003; Yılmaz and Bititci 2006), which is also considered as a financial indicator. This indicator is more frequent in banking sector.

Information technologies is also a common indicator (Aysan and Ceyhan 2008; Chai et al. 2016; Devaraj and Kohli 2003; Ham et al. 2005; Melnyk et al. 2014; Piccoli and Lui 2014), which is an expected finding in an era when it has become almost impossible not to use technology in everyday life. In addition, IT is more frequent in tourism sector, which can be explained by the increased use of online tourism websites such as TripAdvisor and Trivago.

The investment in IT has a positive impact on efficiency, productivity and the performance of firms (Bulchand-Gidumal and Melián-González 2011; Chai et al. 2016; Cummins and Xie 2013; Ham et al. 2005; Ugwu et al. 2000). However, Asimakopoulos and Whalley (2017) have examined the role of technological progress as a significant environmental factor that could alter the market leadership-relative performance relationship. They found that technological change negatively impacts the performance of leading firms.

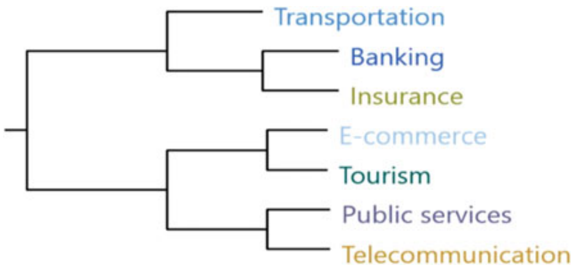
4.4 Indicators Clusters

In this section, we present the result of the cluster coding similarity of Nvivo 11, which mobilizes Pearson Correlation Coefficient. It is a method to detect possible similarity of indicators between sectors. As shown in Fig. 4, the first branch gathers transportation, banking, and insurance. These last two sectors are, in fact, financial sectors which is obvious that they share common indicators. E-commerce, tourism, public services, and telecommunication are assembled in the second branch.

Table 4 Top 10 common indicators

Indicators	Banking	E-commerce	Insurance	Public services	Telecom.	Tourism	Transport	Total FREQ	No of sectors
Costs	25	1	2	3	2	5	1	39	7
IT	7	2	1	4	4	18	2	38	7
Profitability	22	4	1			33	1	61	5
Assets	31		10		2	4	2	49	5
Service quality	5	2		2	5	21		35	5
Customer satisfaction	4	2		4	6	18		34	5
Labor	14	1	5			2	1	23	5
Market share	4	3	1		1	12		21	5
Capital	10	1	2			1	4	18	5
Efficiency	6	2		2	1	3		14	5

Fig. 4 Indicators cluster coding similarity



4.5 Indicators Categorization

In order to provide a better understanding of the indicators in use in value creation literature, we have tried at the third stage of indicators processing to classify them into 17 categories namely Processes, Resources, Productivity, Satisfaction, Service quality, Technology, Environment, External indicators, Innovation, Loyalty, Safety, Security, Culture, Company Image, Retention, Competitive advantage, Trust, and Financial indicators (they have been omitted because they represent the financial performance of firms, which is generally dependent on the value creation process). Figure 5 presents the frequency of these categories in the sectors included in the sample.

In banking, insurance, and transportation, the resources category is the most frequent. It includes indicators such as financial resources and physical resources. Resources have a positive impact on the company performance (Behera et al. 2015).

Resources have to be allocated in an adequate way without waste in order to enhance efficiency (Barros and Alves 2004) and facilitate service innovation (Yen et al. 2012). In tourism sector, resources are also important in value creation literature. They have a positive effect on the value of tourist experiences (Prebensen et al. 2013), and the two main stakeholders: employees and customers (Benavides-Velasco et al. 2014). According to Armas-Cruz (2011), the enhancement of a hotel's environmental management can be done through a suitable allocation of economic, human and technical resources.

In e-commerce, public services, telecommunication, and tourism, the processes category is the most frequent. It comprises indicators related to the main activities of a company such as management, marketing, and delivery speed. The internal processes were presented by Norton and Kaplan as a perspective of the balanced scorecard (BSC), which is an approach that monitors short-term financial performance while also highlighting the value of long-term financial metrics and competitiveness (Kaplan and Norton 2001). This finding is confirmed by Tsai and Cheng (2012). They mobilize the BSC to evaluate web shop performance in Taiwan and they found that the internal processes are the most important indicators in e-commerce followed by earning and growth, customer, and financial.

Fig. 5 Categories frequency by sectors

Productivity, satisfaction, service quality, technology, and environment are also frequent only in banking and tourism sectors. These categories have to be studied in the other sectors because the literature provides less evidence on their contribution to value creation. Finally, the rest of categories are less frequent in all sectors.

5 Conclusion

This study is a meta-analysis of value creation in seven sectors in service, namely banking, e-commerce, insurance, public services, telecommunication, tourism, and transportation. We attempt to answer two basic questions: What is value creation? What are the indicators mobilized in value creation literature in service? Thus, a review of 274 articles has been carried out covering the period from 1996 to 2017.

The review has focused on indicators mobilized in value creation literature. To do, indicators processing has been done through three stages. First, indicators that have the same meaning have been combined. At this stage, the frequent indicators are related to customers and employees.

Second, indicators that are connected to one sector have been eliminated in order to keep only common indicators. At this level, the most frequent indicators are rather financial such as profitability. We have also made a comparison between sectors mobilizing Nvivo 11. The findings showed the existence of two branches. The first one contains transportation, banking, and insurance, whereas E-commerce, tourism, public services, and telecommunication are assembled in the second branch.

Third, we have tried to develop a categorization of the common indicators. Hence, we classified the indicators into 17 categories namely Processes, Resources, Productivity, Satisfaction, Service quality, Technology, Environment, External indicators, Innovation, Loyalty, Safety, Security, Culture, Company Image, Retention, Competitive advantage, Trust, and Financial Indicators. These latter have been omitted in order to concentrate on non-independent indicators. Thus, in banking, insurance, and transportation, the resources category is the most frequent. Nevertheless, the most frequent category in e-commerce, public services, telecommunication, and tourism, is the processes category. The results indicate that productivity, satisfaction, service quality, technology, and environment are more frequent in banking and tourism but less frequent in the other sectors.

Based on this review, it has been observed that certain aspects have perceived less attention according to the low frequency of indicators in use essentially loyalty, culture, and trust. In this sense, studies that aim to establish a relationship between value creation and those variables are needed to show academics and practitioners how to improve them in order to create value. The case study approach is the most suitable one for this kind of analysis.

This research can't be without limitations. First, only a sample of 274 articles has been processed, the study didn't take into consideration all articles published in the research period, which may affect the results of the study. Second, the study didn't incorporate other sources such as conference reports and book chapters.

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Chapter 9
Innovative Cultural Tours in Athens: An Interesting Internship in the Era of Economic Crisis

Efthymia Sarantakou and Simos Xenitellis

Abstract The scope of the paper is to examine the qualitative characteristics of a new touristic and cultural industry emerging in Athens, that of producing alternative tourism cultural Tours. The paper uses the case study of innovative and alternative cultural Tours to explore the following research questions:

- The characteristics of a new entrepreneurial culture that was formed in times of economic crisis and of a simultaneous increase in tourist demand in Athens
- To which extent these new touristic products follow cultural consumer trends.

The methodological approach of the paper was organized as follows: First, there is a brief description—based on data taken from secondary research—of a number of data for Tourism in Athens. Such information demonstrates, on the one hand, the quantitative recovery of Athens as a tourist destination and, on the other hand, a number of quality changes in the characteristics of tourism offer and demand of the city. Then, there is a presentation of the methodology of the qualitative field research, by opinion inquiry Interviews involving key informants, the producers of cultural tours in Athens. Finally, there is an analysis of the research results and the main conclusions in relation to the research axes set.

Keywords Cultural tourism · Urban tourism · Cultural walks

E. Sarantakou (✉) · S. Xenitellis
Open University of Greece, Athens, Greece
e-mail: esarad@otenet.gr

E. Sarantakou
University of West Attica, Athens, Greece

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1 Athens as a Case-Study. The Regeneration of a Mature Destination

The findings of a number of research and studies (AHA 2013, 2014, 2015, 2016, 2017; Chatzidakis 2015; SETE Intelligence 2018) on Tourism in Athens-Attica show that there is a slow yet constant regeneration of Athens as a mature destination, as well as a number of quality changes in Athens Tourism. Some key facts for Athens as a tourist destination during the current time period are the following:

1.1 Increase of Tourist Arrivals Since 2012

With regard to tourist flows, Athens, since the decline of the period 2008–2012,[1] shows a constant recovery with tourist arrivals being doubled to 497,8000 in 2017 from 255,2818 in 2012 (AHA 2017). Increase in Tourism is linked to the opening of the capital towards new markets. Athens is no longer only a stop-over destination,[2] but, on the same time, it also develops city break tourism, congress tourism and youth tourism (AHA 2017).

1.2 The Market of Sharing Economy Extends the Touristic Map of Athens

Since 2013, Athens has shown a significant development in sharing economy of accommodation. Only via the Airbnb platform, the number of residences officially rented in Athens has risen from 500 in 2013 to 7100 in 2018 (AirDNA Market Minder 2018). Tourists that choose the market of accommodation sharing, belong, mainly, to the group of the millennial city break travelers. 71% of Airbnb users are visiting Athens for the first time choose Airbnb due to low cost, but also because they seek authentic experiences (Airbnb's Positive Impact in Athens 2015). According to the data of the company (www.airdna.co), properties that use Airbnb extend in 25 neighborhoods of Athens, out of which 69% are outside the traditional touristic areas. This results to new touristic areas emerging in the city (such as Koukaki, Exarchia etc.).

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[1]In the time period between 2008–2013, a period of social unrest and crisis, performance indicators show a decline of 40 to 60%, and 89 hotels were closed, Chatzidakis 2015, p. 67.

[2]In 2005 only 33% of tourists were visiting Athens for the first time, while in 2017 the percentage rose to 59%, AHA 2017.

1.3 The Changes in the Cultural Image and Profile of the City

Despite various turbulences and fluctuations in the performance of tourism in Athens, in the last fifteen years, the touristic and cultural image of Athens has undoubtedly shown a significant change. Athens is gradually becoming a dynamic destination of cultural/heritage and city break tourism. The city and the wider region—Attica—is dissociating from the one-dimensional cultural image focused on its ancient heritage and it is systematically promoted as a destination with a multidimensional character which can offer a wide range of different cultural experiences to the visitors (Tsartas Sarantakou 2016, Skoultsos 2014).

Such evolution is the result of many factors. The first group of factors is related to the measures taken in the framework of a tourism policy strategy, which have positively affected Athens as a tourist destination, as well as the initiatives implemented by Athens Local Authorities. The second group of factors concerns the enrichment of the capital's cultural infrastructure with symbolic cultural centers (the Stavros Niarchos Foundation Cultural Center, The Michael Cacoyannis Foundation Cultural Center, the Onassis Cultural Center) during the last decade, which completed the infrastructure inherited by the city after the Olympic Games of 2004. In this context, a new "non-conventional" innovative cultural business is being developed in Athens: the walking cultural tours.

2 Qualitative Field Research[3]

The field research was conducted with opinion inquiry Interviews involving key informants, namely, the producers of cultural tours in Athens.

Selection Criteria:

- Producers belonging to the public and private sector
- Producers with a consistent, lasting web presence
- Producers who receive positive reviews on the search engines
- Tours that offer innovation and authenticity.

The research was carried out between November 2016 and May 2017. At that time, there were 23 producers with systematic and exclusive provision of cultural walking tours. The purpose of the survey was to register all forms of producers, from the public and private sector, profit, and non-profit organizations, to present the multitude and variety of everyone involved. Occasional tours providers were excluded.

[3]The field research was carried out for the postgraduate diploma thesis of Xenitellis (2017). Evolution and trends in the management of culture as a tourist product. Athens as a modern cultural tourist destination, HOU, Patras, Supervisor Sarantakou E.

Internet research has been chosen as the main search method, since ongoing online presence is mandatory for the promotion of tourist products and services. All necessary information was collected through online websites, reviews, and travel magazines. For most accurate data collection, important information was obtained from TripAdvisor site regarding the number and date of posting reviews. TripAdvisor has been chosen because it is a social medium with a widespread appeal to the tourism industry. All motorized tours (motorbikes, taxis, car rental and limousines) were also excluded from the list. In order to avoid occasional operating companies or companies no longer in operation, all producers with less than 5 reviews in 2016, as well as those who had no reviews during the six-month research, were removed from the list. The list for data collection was completed after adding companies which were promoting products and services related to the subject of the survey, found through web search, the Hellenic Chamber of Hotels trip2athens web site, tourism magazines etc.

The producers' relevance to the subject of the research "tourist cultural routes in Athens" was confirmed by telephone contact, in order to exclude producers who appeared in the category "cultural tours in Athens" while they were essentially taxi drivers or were executing bus tours.

The interviewed key informants were 20. Thirteen of them were founding members of their organizations, two were cultural walks designers, the marketing manager of the Tourism Management Department—Municipality of Athens for the web site *This is my Athens*, a volunteer of the program This is my Athens, who also works autonomously, the designer responsible for the implementation of the route planning of the trip2athens.com app of a Public Tourism Organization, a certified tour guide responsible for the City of Athens Tours program, and the coordinator of the walks of an NGO. Five of them organize or execute free cultural walking tours.

3 Findings of the Qualitative Field Research

3.1 The Producer's Profile: New Business Models in Tourism—A New Entrepreneurial Culture

The first group of findings relates to the producers' profile. Their analysis confirms the emergence of a new business model in tourism and a new entrepreneurial culture.

85% are newly formed ventures, were founded between 2012 and 2013. Most of the companies providing cultural walking tours were founded during the last eight years 2009–2016, with the exception of the City of Athens free guided tours that has a history of two decades. However, 85% of cultural walks providers are newly formed ventures, established on 2012, with a significant increase of new start-ups in 2013 (Fig. 1).

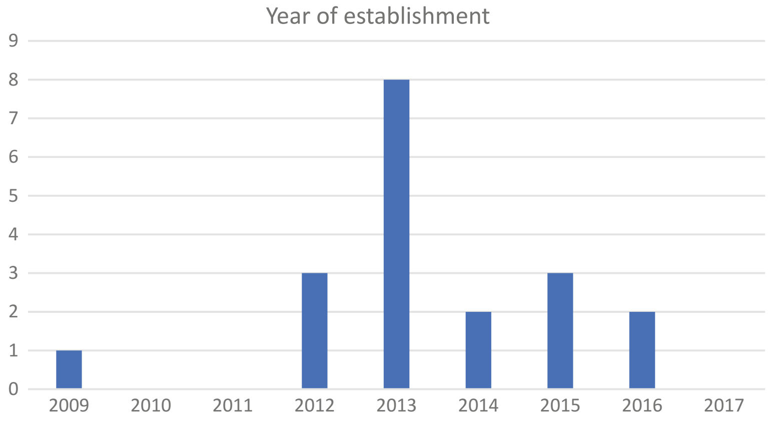

Fig. 1 The year of establishment of the cultural walks companies in Athens (Color figure online)

The producers decided to provide innovative tourist cultural walks because they had identified a gap that existed in Athens tourism market: The alternative cultural products. There are many different reasons why the creators decided to deal with the cultural strolls, but we can understand the common assumption that the original idea emerged from the observation that tourists are not only interested in the classic sightseeing tourism, but also seek to enjoy the experience of the locals and the experience of everyday life. They prefer the experience of a walking tour in relation to the bus tour. The producers identified the absence of organized walks that would reveal the different perceptions of the multicultural city of Athens.

Quite a few attempts started off cooperatively. Over half of the producers work with external collaborators. Most walking tour companies cooperate with the tour guides either in an employee relationship, or as external associates. In four cases the escorts have a clerical relationship, while in eleven cases they are external associates.

A significant percentage of the producers and collaborators were not formerly related to tourism (experience or tourist studies). Three out of twenty producers existed as travel agencies. While some of the producers were previously working as tour guides and escorts or were employees in tourist companies, however, most of them had no prior relationship with tourism. For example, at Architecture routes, escorts are architects, and at the Street Art walks escorts are often artists of graffiti. In many occasions, wine-tasting tours and even the “greek home meal” gastronomy tours are presented by a local. The “Invisible Routes” of the NGO magazine “Shedia”, are performed by current and former homeless people of the city (Xenitellis 2017).

For most producers and collaborators, this was a way to escape unemployment. For many producers the main reason for involving in the service of cultural walking tours was to find a way out of unemployment, especially for the walking tours escorts, who through this tourist product were able to use their studies (architecture, philosophy, acting) and their knowledge, interests, hobbies and experiences as locals.

The local community participates through voluntary projects. For the NGO, two Municipality services and the online free walking tours, escorting is a voluntary service. There is, therefore, significant involvement of the local community. The spread of the sharing economy has expanded the involvement of local communities in the provision of tourism services as they participate in voluntary initiatives. It is also clear that, in modern societies, cultural heritage remodels space perception by new terms and innovative perspectives, resulting in the appearance of claims by different social groups and communities.

3.2 New Trends in Touring

The second group of findings is about the innovation of tours. New ways of guided tours are recorded, more imaginative and theatrical, associated with the guide's personality. The survey shows that depending on the cultural walk theme, producers cooperate with:

Qualified tour guides, mainly for archaeological sites and museums. Tour guides are employed mainly for guided tours of archaeological sites and museums. Under Greek law, non-certified tour guides have no right to provide guided sightseeing tours in archaeological sites and museums.

Professionals or volunteers with relevant academic or professional relation to the theme of the tour, such as architects, historians, philologists etc. Athens cultural walk escorts are also professionals or volunteers with a relative academic or professional relationship with the theme of the walks. Architects are the escorts on routes related to the architectural heritage of the city, actors are called to "dramatize" a cultural imaginative journey on a myth, and graffiti artists present the city's street art.

Locals with no relevant specialization, like housewives, students, and homeless people. Locals, without necessarily a relative specialization, organize and perform tours for the tourists. Housewives, retired elders, homeless, students, etc. provide cooking lessons, Athens nightlife entertainment by browsing bars, local "bouzoukia" and "rebetadika" offering Greek folk music, and even backgammon lessons in traditional city cafes, and many other alternative experiences of the everyday city life.

3.3 The Profile of the Cultural Tourist in Athens

The third group of our findings is about the demographic characteristics of the consumer of cultural walks.

Country of origin: Main countries of origin are the USA (up to 90% for three producers), France, Germany, and the UK. Traveling to Greece is a dream of life for many US visitors, who want to experience an authentic experience of everyday life Athens. The European countries of France, Germany and England have also a large share in demand.

Gender: The culture consuming tourists are equally men and women, but reservations are made by women in 90% of the cases. Although, the culture consuming tourists are equally men and women, at free cultural walks women participated at a percentage of 60%. Women have a more intense cultural interest, as the organizers claimed. An interesting finding is that, in some cases, the names in the bookings are female by 90%, indicating that the buyers are mostly women.

Age: Most of the clients of the cultural tours are between 30 and 65 years old. The demand for cultural walks in Athens is high between 30 and 65 years old tourists, while 65+ are over 50% of the consumers. Also, 65+ choose tours with qualified guides. On the contrary, the millennials, being a budget-oriented group, do not consume walking tours, except in the case of organized visits by educational institutions. However, their participation in free or low-cost routes is important.

Family status: Individual tourists, couples, groups of friends as well as families with children. Most producers have developed tours of content that meets the individual needs and wishes in each case (e.g. Ancient Agora routes and children's play of ostracism, or imitation of the life of the children in ancient Athens).

Educational level: Most cultural tourists have an above-average educational level. Most cultural tourists have a high educational level. The informants perceive the cultural walks tourists as customers who have a special characteristic of personality, identifying a person cultivated, with particular sensitivities, with an increased inclination to innovation and a desire for new cultural experiences.

Financial Status: The financial status of cultural tourists is above average. The financial status of cultural tourists of Athenian walks is mostly medium to high. The free routes involve visitors of every economic profile (Fig. 2).

Accommodation: First choice remains staying in hotels, but there is also a strong tendency for Airbnb accommodation. Hotels are still the first choice of cultural tourists, however, there is a strong upward trend in Airbnb rentals, which tends to become a key option. The responses of most producers estimate the upward trend of Airbnb, which, as we see in Fig. 3, is approaching the hotel rates.

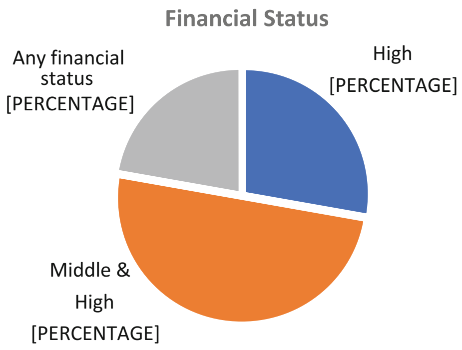

Fig. 2 Financial Status of the cultural walks tourists of Athens (Color figure online)

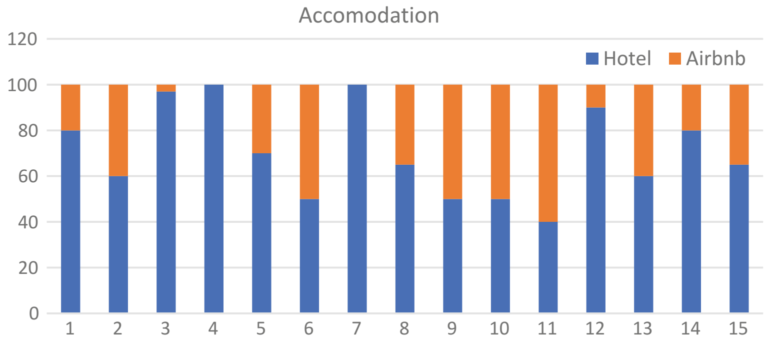

Fig. 3 Accommodation type preferred by cultural tourists in Athens (Color figure online)

Staying in Athens. There is a significant seasonal dispersion. The seasonal dispersion of cultural tourism is significantly greater than the dominating tourism model "Sun and Sea", a fact confirmed for Athens through the survey findings. According to the producers, 80% of the tourists stay in Athens for a period of 2–3 days. The remaining 20% stay for up to one week. Athens remains a stopover destination mainly for the Greek islands and other famous archaeological nearby destinations, but city break tourism is also strongly developing.

3.4 Segmenting the Cultural Tourism Market in Athens (Using the McKercher and Du Cros (2003) Model)[4]

The fourth group of our findings concerns the exploration of the characteristics of the consumer of tourist cultural walks. There is a wide market of general cultural tourists with a strong or medium incentive to consume alternative cultural products (Sarantakou 2010).

All producers replied that a place, and especially Athens, shapes the type of tourist, a condition that is obviously a catalyst for the conclusions that follow, about the typology of Athens cultural tourists. The typology indicated by the model of McKercher and Du Cros (2003) was explained to the producers, and by this, they proceeded with their classification, initially based on the main motivation and then on the criterion of deepening on the experience. The findings of the survey confirm the assumption that special cultural tourists have a lower percentage than general

[4]According to the McKercher and Du Cros (2003) model, cultural tourists are categorized according to the degree of empathy of their experience and the intensity of culture as a criterion for choosing their holidays to: Purposeful (high importance/deep experience), Sightseeing (high importance/shallow experience), Modest or Casual (average meaning/shallow experience), Incidental (low meaning/shallow experience), and Serendipitous (low meaning/deep experience).

Table 1 Segmentation of the cultural tourists of Athens

Experience sought motivation	Deep	Shallow
High 27.5%	Purposeful 27.5%	Sightseeing
Low 70.0%	Serendipitous 20.5%	Casual 49.5%
Almost none 2.5%		Incidental 2.5%

cultural tourists. However, in the case of producers who include routes of specialized cultural interest, the percentage of special cultural tourists is rising sharply.

Using motivation as a criterion:

27.5% are "Special Cultural Tourists" with high cultural motive

70% are "General Cultural Tourists" with medium cultural motive

2.5% are "Incidental General Cultural Tourists" with low or no cultural motive.

Field research indicated 72.5% general tourists, divided by 70% to general tourists with low motivation for culture, 2.5% to the incidental cultural tourists with almost no incentive to culture, and 27.5% to special cultural tourists with great incitement to culture.

Using the depth of experience as a criterion:

48% are Cultural Tourists who seek "in-depth experience"

52% are Cultural Tourists seeking superficial experience

As far as the depth of experience is concerned, responses divide the rates by 48% to tourists with deep empathy of experience and 52% to tourists who have a shallow experience (casual 49.5% & incidental 2.5%). The large quota of special tourists is due to specialized themed tours, where tourists respond 27.5% to the experience. Also, tourists with low cultural motivation do not know exactly what they will see but 20.5% are impressed and enthusiastic about of the unexpected experience (serendipitous). We could attribute the above percentages to the model of McKercher and Du Cros (2003) (Table 1) as follows:

Special Cultural Tourists respond to routes with specialized themes such as ancient Greek culture, city architecture, migrant and homeless life, graffiti, or other academic interest. However, the city of Athens attracts cultural tourism in high rates, due to the glory of its ancient Greek past.

3.5 The Extent to Which These New Touristic Products Follow Cultural Consumer Trends

The fifth group of findings is about the cultural product. It turns out that although the basic cultural tourism product of Athens is still the ancient era, the incorporation of the new trends of cultural consumption (Gravari-Barbas 2014) significantly enriches the cultural image of the city. The analysis of the findings shows that:

Distinction between «high» and «mass» culture has become blurred. The tendency of mitigating the traditional "high" and "mass" culture distinctions, as well as the intense use of the least developed tourism resources of culture, other than stereotypes, are confirmed. Modern cultural tourism products combine culture and leisure.

Promotion of different aspects of city's heritage. Our conclusions converge on the value of the city's archaeological wealth, both in terms of demand and supply. However, innovative perceptions of culture are emerging in tourism demand, supply, and management of cultural capital. Now, there is no one-dimensional emphasis on heritage, but its combination with other cultural resources or different thematic contents. Different historical eras, traditional culture, expressions of everyday life, the culture of minorities, immigrants, young people, etc. are the modern resources of cultural tourism.

Use of non-stereotypical cultural resources. Cultural routes also use untapped cultural resources. Classic Athens and its archaeological sites (Acropolis, Acropolis Museum, Ancient market, Archaeological museum, historical triangle) is the main purpose for a cultural visit. At the same time, new or renovated buildings and organizations are being used as cultural resources, such as the Niarchos Foundation Cultural Center or the Benaki Museum. Also, the routes include Athens' commercial markets, nightlife, and neighborhood visits, as producers consider it necessary to include resources beyond stereotypical perceptions. For this reason, they use the sights of the flea markets, graffiti, the places where refugees live as a "view" of the refugee flows. Cultural resources are also the social movements, contemporary art, galleries, and the modern way of life. The most attractive thematic axes of walks include (Table 2):

Democratization of heritage, in the sense that the ability of "bottom up" groups to engage in heritage-making has increased. The cultural heritage remodels the city with new conditions and innovative perspectives, resulting in phenomena of public domain claims by different social groups and communities. Thus, the culture of minorities, immigrants, young people, etc. are the modern resources of cultural tourism. For example, cultural walks' places of interest are the buildings occupied by refugees, for those who are interested in the refugee flows in Athens. Also, producers organize routes that highlight the buildings and places of

Table 2 The emergence of innovative cultural resources of Athens through new alternative walks

• Ancient Heritage of Athens through mythology story telling tours
• Open markets, local gastronomy, and traditional products
• Everyday life experience
• Galleries, art workshops and traditional craft products
• City's neighborhoods
• Night life, undiscovered spots
• Street art tours, Graffiti
• Refugees stories (Historic and contemporary examples)
• Life in the era of economic crisis, the homeless, Self-organized Social Movements

refugee flows of the past. Cultural tourism is not limited to the admiration of the antiquities of an area, but, at the same time, it extends to the understanding of the way in which the locals behave or think, and to the direct contact of the visitors with the local habits and customs. The transformations in the city's human geography, due to migratory flows and the economic crisis, are catalytic factors in designing tourist products that deliver the "experience" of the new claims of public space and way of life.

Tailor made Tours with diversity and innovation. Producers develop cultural walks with photography lessons or photography competitions, routes to the open-air markets with cooking classes, routes to the Ancient Agora with a game of hidden treasure for families with young children. They combine visits to temples dedicated to Asclepius, and to a monastery where a monk informs the tourists about the healing abilities of the herbs. A stroll of Athens is a synthesis of a walk to the ancient attractions and the participation in a symposium where, in the presence of a teacher of philosophy, a philosophical, scientific or any subject related to ancient Greek literature is analyzed.

Modern cultural tourism products are the result of a synthesis. The modern trend in the formation of tourist cultural products and services is the composition of different attractions or activities, which are implemented in a variety of ways. The most common is the combination of similar products. The creation of a package of alternative activities of common interest is preferred by highly motivated travelers. Another format, however, involves the combination of cultural products from different cultural resources, for example the combination of festivals and art areas. The advantages of this approach are: the attraction of more general cultural tourists, the reduction of the competition of cultural products and the increased sense of cost-value satisfaction. An important third form of experience synthesis is the combination of cultural and non-cultural products. For example, the combination of a visit to a cultural attraction combined with leisure activities. This combination product has a broad appeal, as it meets the expectation of a complete experience of the locals' lifestyle.

Involvement of local community. The proliferation of the sharing economy has prompted the activation of local communities in the provision of tourism services. The implementation by organizations of the Municipality, as well as companies and organizations, is based on the promotion of the least prominent sights of the city, as well as the most authentic elements of the tourist experience. On the cultural routes of the city, the escorts are now professionals or volunteers with a relative academic or professional relationship with the theme of the routes, but also "locals", without necessarily any specialization, wishing to guide the city visitors.

Many local professionals cooperate with the cultural walks producers, like the local craftsmen, traders, providers of cooking classes, artists or art producers, as they enhance the experience of the local way of life. The focus on forgotten professions and arts also enhances the integration of local cultural producers. The producers of the cultural walks develop networks with traditional craftsmen and young artists. They cooperate with small merchants and producers of local products, but also with large bookshops and organizations (museums, festivals, etc.).

3.6 The Use of the Web and New Technologies

The sixth group of our findings is about the use of the Web and new technologies

90–95% of cultural walks consumers are informed through the web. The rest are getting informed through “word of mouth” from friends and family, from tour operators and travel agencies, as well as focused marketing strategies for Universities.

There is an increased trend for differentiation of the channels that diffuse the tourist information. Information for tourist products and services is produced and disseminated by both visitors and residents of the city in formal and informal sites, social media, and evaluation reviews of tourism service providers. The use of the Internet is necessary in seeking information and in the provision and promotion of cultural tourism, a fact that confirms the imposition of technology trends.

Sharing economy platforms, like Airbnb, promote thematic tours as “experiences” to their clients. Visitors’ pursuit of an authentic experience has shaped the trend of dissemination of travel services through the channels of the distribution economy. In urban destinations the visitor can locate and choose between individual and specialized service providers. For example, Airbnb platform promotes cultural walks to the customers as “experiences”.

Nevertheless, cultural walks producers and tourists do not use advanced digital applications such as virtual tours. Innovative digital applications such as 3D representations, information digitization, applications of virtual reality technology etc. are not used on a cultural walk. Up until now, cultural tourists seek the authentic experience of a walking tour.

4 Conclusions

The main conclusions of the survey, in relation to the research questions, could be summarized as follows:

I. The products of the new cultural tours have enriched the cultural tourism image of Athens to a great extent. The ancient Greek heritage has retained an important significance in the cultural image of Athens. However, on one hand, the new products of cultural tours have “freshen up” the visitors contact with the ancient Greek heritage through alternative ways of cultural consumption and, on the other hand, they enrich the cultural image of the city by promoting modern, contemporary culture and the everyday life of Athens.

Modern products of cultural tourism combine culture and leisure. Creativity can be, most of the times, transformed to a tourist attraction. Different historical eras, traditional culture, local everyday life and the culture of the minorities, immigrants, youths etc. are the latest resources of cultural tourism. Cultural institutions, local artists and craftsmen are additional members of a wide network of cooperation, which are designed and promoted by a flexible and innovative network of newly established, small-scale organization resulting to reinforcing the integration of local cultural producers.

II. The enterprises included in our research cover a gap which existed in the market, that of the tailor-made products, addressed to a significant market, the general cultural city tourist. Cultural tours meet the needs of a wide market of city break tourists with medium or high motivation to consume cultural products as a pleasant experience. The tourists can adjust the guided tours to their measures or even ask for specific themes or experiences.

III. The new enterprises of cultural tours are in a transitional stage regarding their organization model. To a significant extent, these are initiatives that started individuals that were not closely related to tourism who saw a solution against unemployment, in times of economic crisis, but at the same time, of an increase in tourist demand for Athens. These were the conditions that formed a new entrepreneurial culture. Following the findings of the field research, most units which develop the product of tours are small-scale units without resources or production means. It is clear that new, flexible and alternative production means emerge. The economy of accommodation sharing enhances the active role of local communities in the provision of tourism services. In order to survive the competition, such enterprises need to proceed from an early collaborative startup status to an organized tourism and leisure company. Research indicates that collaborations and mergers are a possible solution.

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Chapter 10
Hotel Innovation and the Creation of Competitive Advantage

Georgia Yfantidou, Eleni Spyridopoulou, Thekla Chatzigeorgiou and Paraskevi Malliou

Abstract The objective of this research is to investigate the innovative factors and their effect on maximizing the efficiency of the services provided by the hotel accommodation. This paper is a literature review about hotel innovation. There is an urgent need to provide a unique differentiation of hotel products and examine the added value by providing innovative ideas to services to improve tourist experience. This paper is an introduction of new innovative ideas for further research and development of issues related to hotel services. The competitive environment is increasing and the solution for hotels is to be competitive and work under a systematic strategic using innovative ideas and create personal products for each customer for a unique stay. Being different and competitive is not only an idea but a choice to succeed.

Keywords Hospitality · Innovation · Hotel · Added value · Competitiveness

JEL Classification L83 sports · Gambling · Restaurants · Recreation Tourism · Z32 tourism and development

1 Introduction

Today, tourism holds a key role in the economic recovery of Greece. The strategic plan for tourism is tailored to the tourists' habits, the destination's selection criteria, the way that the tourists seek information and the channels through which they purchase services and organize their trip. Tourism has become one of the most important social and economic activity in Europe. Tourism brings further income

G. Yfantidou (✉) · E. Spyridopoulou · P. Malliou
Department of Physical Education and Sport Science, Democritus University of Thrace, Komotini, Greece
e-mail: gifantid@phyed.duth.gr

T. Chatzigeorgiou
School of Pedagogical and Technological Education (ASPETE), Komotini, Greece

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and employment, understanding of other cultures, conservation of natural and cultural heritage, infrastructure development, which in turn have social and economic benefits. Tourism depends more than any other human activity on the quality of natural and cultural environment. As a special form of entertainment, tourism has its own special characteristics. Moore, Cushman & Simmons (1995), stated that certain types of tourism can be distinguished based on the characteristics of entertainment.

According to the World Travel & Tourism Council (2015), tourism is the largest industry in the world and is predicted to grow continuously into the 21st century. Tourism industry is based on the hotel infrastructure of each country, which contains independent hotels and hotel chains. Both can cover lots of the tourist needs by offering integrated products in more advantageous prices. Pricing is inextricably linked with the quality of tourism products and services. A tour operator who has expert knowledge of the constantly changing market, is able to offer a greater variety of tourist packages and superior quality services. Botterill & Crompton (1996) noted that the customer is really satisfied when the result exceeds their expectations. Thus, companies should constantly seek to cover the expectations of their clients maximally if they want to be competitive.

This paper provides a unique means of hotel businesses nationally and internationally from the traditional hotel product to a consideration of adding value by providing facilities and services that make the hotel the center of the holiday. Differentiation is now a basic requirement. This paper suggests that hotels should adopt innovative ideas and reinvent themselves in order to be competitive. Staying closer to customer is an essential ingredient for the future market place. This paper is under the project "Go Functional Improvement & Tourism—GO FIT".

2 Defining Innovation

Innovations must be 'new', which relates to an idea that is perceived as 'new' to an individual regardless of when it was first used or discovered, and must be successfully implemented to derive an economic benefit. It is important to introduce new service business models through continuous improvement of operating technology, return on investment in human resources or management of the customer experience. One definition of innovation is given by the OECD's Oslo Manual and according to this, innovation is "the implementation of a new or significantly improved product (good or service), or process, an innovative marketing method, or a new organizational method in business practices, workplace organization or external relations" (The Organization for Economic Cooperation and Development 2005). There are several definitions of innovation, many researchers define innovation as a process, while others state that innovation can also be a function, an activity or a result. Either way, innovation is equivalent to the creation or development of something new (Nagy 2014). Gallouj & Weinstein (1997) stated that "service innovation is characterized by service particularities such as intangibility, perishability or simultaneity, which also helps reduce the gap between the service provider and the consumer, a gap that still exists in other industries because there is no interaction between the two parties". The invention is the conception of the idea while innovation is the simultaneous translation in economic terms. The conception of the idea is the principle of innovation.

Therefore, defining service innovation is not an easy task. Mudrak, van Wagenberg & Wubben (2005), refer that "Service innovation is the process through which a firm undertakes changes in its philosophy, culture, operations and procedures to add value to the result of the service or product for the benefit of the customer". Another definition of the concept was suggested during the Cornell Hospitality Roundtable: "Service innovation is the introduction of new or novel ideas which focus on services that provide pioneer ways of delivering a benefit, new service concepts, or new service business models through continuous operational improvement, technology, investment in employee performance, or management of the customer experience" (Verma, Anderson, Dixon, Enz, Thompson &Victorino 2008).

A service innovation always includes replicable criteria that can be identified and systematically reproduced in industry, these could be the service outcome or the service process which benefits the service provider and the customers. These criteria improve the developer's competitive advantage by using some technological or systematic method during the design stages of service criteria development. Berry, Shankar, Parish, Cadwallader & Dotzel (2006), examined a pioneering model that requires firms to innovate in two distinct service innovation fronts: (1) innovation in how service is delivered and (2) innovation of new offerings that satisfy the core benefits sought by service customers.

The innovation types according to many researches intend to analyze four clusters of concern from the literature on hospitality innovation (Jones 1999; Orfila-Sintes et al. 2005) namely: management, external communications, service scope and back-office. Therefore, we may argue that competitiveness in tourism is particularly dependent on innovation for achieving lower costs and higher quality outputs (Ottenbacher & Gnoth 2005; Chadee & Mattsson 1996) such as improved services and products, environmental issues, information and communication technologies (ICT hereafter) interaction (Orfila-Sintesa & Mattsson 2007).

Coombs and Miles (2000) suggest three different categories of theoretical approaches in service innovation. The Assimilation Approach assumes that innovation in services is similar to innovation in manufacturing. In general, this approach describes a rather passive role to service innovation which, according to this view, is mainly driven by the technological development in manufacturing industries Second, the Demarcation Approach clearly distinguishes service innovation from innovation in manufacturing. This approach postulates that due to the specific traits of services, service innovation must be treated differently from manufacturing innovation. Finally, the Synthesis Approach follows the idea of an increasing convergence of services and manufacturing. There are both, shared features and differentiating characteristics of innovations in services and in manufacturing.

According to Tseng, Lin, Lim & Teehankee (2015), the criteria used to evaluate service innovation are multiple and the following factors are proposed: Information technology, Technology structure, Business culture, Acquisition knowledge management processes, Conversion knowledge, Application of innovative knowledge, Security on operations knowledge, Market share, Service innovation competitiveness, Specialized market units, Monitoring market forces, Success rate of R&D products/services, Self-generated innovative products/services, Number of new products/services applications, Degree of innovativeness of R&D products, Intensity of collaboration with others, R&D knowledge sharing ability, Forecasting and evaluation of technology innovation and Entrepreneurial innovation initiatives.

Finally, innovation and value are interesting issues for academics and practitioners, and some studies emphasize the service-dominant logic, which can provide a framework for understanding how value gets co-created by the firm, customers, employees, and technology within a system, such that it gets differentiated from competing firms' offers (Vargo & Lusch 2004). The resource-based strategic necessity hypothesis supports that information technology creates advantages by leveraging or exploiting existing human and business resources and it could be a competitive advantage to a hospitality firm (Clemons & Row 1991; Bilgihan, Okumus, "Khal" Nusair, & Joon-Wuk Kwun 2011). Verma et al. (2008) agrees to this concept and refers to the key elements of service innovation such asa) customer focused—to exceed the customer's expectations, (b) process focused—to improve and adapt the products and services by using modern technologies or new methods of organizing the innovation process, (c) continuous improvement oriented—to seek out the trends in the industry in order to provide intuitive services to the customer.

3 Hotel Services and Innovation

The features and the characteristics of the experience economy become markedly important based on value adding consumption of products (Andersson & Andersson 2006). McCabe (2009) highlighted the fact that "hospitality services are much more than simply about selling food and drink or providing people with a roof over their head for a night" (essential or basic needs of life). They are rather "delivered as a consumer experience" and becoming an 'experiential consumer good' that are aimed at satisfying 'consumer's emotions'. Also, Lashley (2008) expressed how hospitality is 'rooted in social engagement'. Jalali (2013) expressed that entertainment and art industries; hospitality industry and tourism can be closely tied to each other and this relationship is growing.

There are three main characteristics in the hotel industry that are different from other service activities. First, there is the regular category classification "stars" of hotels which goes from 1 to 5 and determines the type, number and quality of services provided. Second, it is usual to have firms specialized in managing hotels; and there are hotels where owners manage them, owners that rent the hotels, or professional executives running hotels through a management contract; or under a franchise contract. Third, the hotel chains which have a central office, depending on the company, with different attributions and several degrees of vertical integration (Orfila-Sintes, Crespi- Cladera & Martinez-Ros 2005).

"Tomorrow's consumers are more sophisticated, educated and travel experienced, older and more affluent, more physically and mentally active, more self-aware in an increasingly stressful world, seek value learning and self-improvement, look for more innovation in destinations and activities, seek holidays that have a minimal impact on the physical and cultural environments, an increasingly look for better value for money, and for 'more' than the traditional hotel product" (Hackett & Melia 2012).

Innovation activity should be defined as two innovation degrees in which client intensity is monitored by hotels and leads to the introduction of additional characteristics to existing attributes (incremental innovation) or to the adoption of a new attribute (radical innovation) in the services provided, although these changes in the service may come from process innovation (MartÍnez-Ros & Orfila-Sintes 2009).

The market segment can be approached through the type of board sold, the channels used in commercializing the service and the degree of customer loyalty. Innovation propensity can be explored based on these features. The channels used to commercialize the service can also be innovated through the new possibilities offered by the information and communication technologies (e.g., booking via the Internet) or else be improved by using recent technologies (Sangster 2001). The hotels' differentiation is the strategic behavior related to its closest competitors, companies with similar services in the same area. Using technological innovations, to differentiate services, can provide tourist accommodation services in addition or higher quality than those of their competitors. This differentiation, according to Chung & Kalnins (2001) is considered as a major competitive variable, achievable through innovation. Nowadays apple presented ibeacon. The term iBeacon and Beacon are often used interchangeably. iBeacon is the name for Apple's technology standard, which allows Mobile Apps (running on both iOS and Android devices) to listen for signals from beacons in the physical world and react accordingly. In essence, iBeacon technology allows Mobile Apps to understand their position on a micro-local scale, and deliver hyper-contextual content to users based on location. The underlying communication technology is Bluetooth Low Energy. Raddisson BLU hotels started to use these devices to increase quality standards for their customer. This technology begins from tourists' arrival to information given about a nearby activity. Many applications have been designed to help the hotels to keep connected to their guests wherever they are before, during and after their stay to satisfy their guests' needs.

Service innovation capability is crucial for an international hotel to acquire a competitive advantage, which enables the hotel to respond to or exceed customer expectations for novel and unique services. Service innovation capability is deemed contributive to hotels' competitive advantages, however, research exploring the ways of improving service innovation capability is scant. Customers of international tourist hotels have high expectations for service quality and accommodation experience. To maintain their competitive advantages, hotels have to strive to satisfy customer demands for new and unique services (Hu et al. 2009). Service innovation is a source of competitive advantage for hotels (Ottenbacher & Gnoth 2005) because new services can help attract new customers, increase customer loyalty, create new market opportunities, and raise sales performance and profitability (Huang 2014; Nicolau & Santa-Maria 2013; Tang, Wang, & Tang 2015).

Survival of tourist enterprises in today's demanding, dynamic and competitive market allows only monitoring of trends and this is primarily the improvement of product and service quality at all levels of the business with the most efficient and effective performance of business processes. It is necessary to work on improving the excellence, innovation and quality products and services and on improving knowledge, skills and abilities of employees. Only the companies that are focused on quality, satisfaction of their customers and their employees can compete on the demanding tourist market (Sladoljev, Sisara & Goles 2014). Investments in innovation are considered a key element in explaining a firm's competitive advantage, either in costs or differentiation strategy, which in both cases might lead to better performance indicators for the firm (Peteraf 1993; Tugores & García 2015).

Hotel success has been contributed to high key factors such as the quality of the infrastructure and products of the hotel, the location of the property, the staff that provide the services in the hotel and the high rate of customer care and satisfaction that the establishment provides. These hotels are focusing on differentiating themselves to such an extent that the hotel is the tourist attraction and is an integral part of the stay. The ability to develop and launch successful new services in the market place is not only critical for survival but also creates a competitive advantage for the organization (Ottenbacher & Harrington 2010).

Furthermore, it has been recognized that the level of tourist satisfaction can be attributed to the different properties of each destination, including the tangible products, the prices, the intangible quality of service and friendliness of the local people (Crompton & Love 1995). Heide, Gronhaug & Engset (1999), developed a measurement scale of 22 questions for the business hotel industry which is about the tourists' satisfaction (hotel customers). They revealed that 70% of the total variance of overall satisfaction was due to the physical size of the rooms and the intangible dimension of the reception area. Mueller & Kaufmann (2001), refer that in health tourism hotels (spa), due to international competition in this specific market, the higher quality of services is vital to customers' satisfaction due to their high expectations. Also, Castro, Armario-Martin & Ruiz-Martin (2007), emphasized that the satisfaction is the variable that leads tourists to visit the same destination again and recommend it to others.

In the research of Randhawa, Kim & Cichy (2017), managers noted that revitalizing different areas of the hotel's real estate and assets, such as the golf courses, kitchens, and dining areas, have increased the participation. Two managers described some of their efforts. They remodeled the pool cabana complex to provide a higher level of food and bar service. They peaked on revenue and usage. With the renovation, they created four outdoor dining verandas that can seat up to 200 people at one time, which were full most evenings in the summer. Renovation helped the hotel attract its current guests to use the facilities more frequently by providing guests with higher perceived value in the newer facilities. According to Suh, West & Shin (2012), the core competencies that are more important to the success of future managers in the hospitality industry have six dimensions: hospitality skills, interpersonal skills, supervisory skills, food and beverage management skills, leadership and communication skills. Another example is the possibility for the visitor to choose to clean the towels which is an environmentally friendly solution and at the same time reduces cleaning costs. This improvement of service (at least for the "green" customer) can then be combined with other innovations in the operation of the internal processes department such as: reducing workers from tumble dryers and the simultaneous increase of employees to serve customers. Finally, to complete the holistic example of innovation, this "green towel service" with reduced costs should: to be communicated to the market through the external communication type. This could be achieved using a user-friendly internet service. In this way the hotel will gain a "green" image (and combine it with a green key award) and all four types of innovation are integrated to improve the hotel's performance.

4 Conclusion

Innovation is one of the main determinants of competitiveness. The inter-sector heterogeneity should be considered while applying innovation theory to service sectors, since it is essential to study innovation in one specific sector at a time. Innovation is the creation of new possibilities for additional added value, considering not only the typical product/process innovation of manufacturing but also market, organizational, and resource input innovation. According to Prahalad & Ramaswamy (2004), suggest that innovation might need to shift, toward the co-creation experience of people. As competition intensifies and the pace of change accelerates, firms need to exploit existing competences or exploring new opportunities (Jansen, Van den Bosch & Volberda 2006; Floyd & Lane 2000). The service differentiation strategy involves greater presence of human resources. Furthermore, establishments with a stronger market-oriented strategy implemented over time would be able to introduce innovations that require more trials and adjustments when they are functioning below maximum capacity (Sirilli & Evangelista 1998), thereby generating more options for radical innovation (Martinez-Ros & Orfila-Sintes 2009). Guests are hoping that hotels will not only provide comfortable accommodation, but they will help to gain an unforgettable travel experience. Thus, international hotels should be geared to create functional and recreational values to meet customer expectations. In addition to providing accommodation and catering services, entertainment services (e.g. leisure facilities, spa, sightseeing, etc.) focuses on creating value for the customer. The provision of sport and recreational services is currently: a lucrative energy for business, which brings increased profits, repeated customers, enhanced experience for audiences of all ages and higher value at the hotel product (Choy 2000).

The hotel industry was chosen for this study because tourism is an important and extremely competitive sector, which is characterized by continuous transformation (World Tourism Organization 2004).

Integrating innovation is now a real and necessary fact for the hotel industry because mainly the life cycle of their product presents two major challenges (Kotler et al. 2006). Firstly, because all products eventually decline, the hotel business has to find new products to replace the older ones (the problem of developing new products). Secondly, the company needs to understand how its products decline, and then it should change strategy as products go through their life cycle stages.

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Part II
Shedding Lights on the Potentials of Special Types of Tourism

Chapter 11
Religious Tourism Development in Lesvos Island. Potentials and Prospects in a Spiritual Approach of Priests of Lesvos

Konstantinos Mouratidis, Maria Doumi and Theodoros Stavrinoudis

Abstract This paper aims to (a) present the opinions of the priests of Lesvos on the current situation of religious tourism in Lesvos, (b) explore the potentials and prospects for the further development of religious tourism and (c) formulate policy proposals for its systematic development. The exploration of the research objectives was carried out by contacting a quantitative research, the questionnaires of which were distributed among all the priest of Lesvos. The survey was contacted in February 2017, using the inventory method and the data collected were based on descriptive and inductive statistics. The investigation showed that Lesvos, as a religious destination, has been developed to a significant extent but, it still has many prospects of growth. The survey highlighted the need for the implementation of an integrated strategic planning for local tourism development, which through targeted actions will cover the basic strategic directions for further development of religious tourism in the Island.

Keywords Religious tourism · Lesvos · Greece · Priests · Tourism development

JEL Classification Z32 tourism & development · Z39 tourism: other

1 Introduction

Religious tourism is as old as the religion itself and consequently it is considered the oldest form of tourism (Karar 2010; Rinschede 1992). Today, it is a well-known special form of tourism with global development and it's recognized as a dynamic

K. Mouratidis (✉)
Interdepartmental Postgraduate Program "Tourism Planning, Management and Policy", University of the Aegean, Chios, Greece
e-mail: emtm15018@emt.aegean.gr

M. Doumi · T. Stavrinoudis
Department of Business Administration, University of the Aegean, Chios, Greece

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field in the modern international tourism industry. It expresses the desire of people to travel from their place of residence to another place they consider sacred due to the existence of sacred monuments (Lagos 2005). According to Rinschede (1992), religious tourism is that type of tourism whose participants are motivated either in part or exclusively for religious reasons and it's closely connected with holiday and cultural tourism. Indeed, religious tourism is considered as a subcategory of cultural tourism where participants in organized pilgrimages often have an extra day to make day trips and visit specific sights of the surrounding areas (e.g. Pilgrims in Lourdes visit Andorra or Spanish Pyrenees). In another view, Santos (2003: 29) emphasizes that *"religious tourism is the expression that has been used by tour operators and religious leaders to describe all situations that bring together religion and tourism, including pilgrimages"*.

Nowadays, religious tourism is regarded as an economic, environmental, social power and a political phenomenon (Richter 1989) that generates revenues in a different way comparing to other forms of tourism (Karar 2010). Travel to the major pilgrimage destinations has seen a rapid increase, partially because of the coinciding growth of both religious, pilgrimage and other forms of tourism (Lloyd 1998). A recent research of Yalghouzaghaj and Shorbolagh (2013) shows that religious tourism is of great potentials to create high income for the countries—destinations by attracting thousands of tourists every year. All around the world, religion and its associated sites, ritual, festivals, and landscapes are considered by many government officials and tourism industry promoters as a form of heritage (Timothy and Boyd 2003).

According to the aforementioned facts, the main objective of this paper is the exploration of the potentials and prospects for the further development of religious tourism in Lesvos. Taking into consideration that the development of religious tourism cannot be achieved without the involvement and contribution of the ecclesiastical sector, the present survey attempts—through a spiritual approach of the priests of Lesvos—to present the current situation of religious tourism in Lesvos, to explore the potentials and prospects for the further development of religious tourism and to formulate policy proposals for its systematic development, which will promote religious tourism in the region of the North-East Aegean, contributing to the establishment of Lesvos as a pilgrimage destination. From the extensive literature review, very few researches have investigated the views of priests for the development and promotion of religious tourism. Therefore, there is a research gap in identifying religious tourism potentials, challenges and prospects in Greece, according to the priests' opinions, which needs to be filled with empirical evidences.

Lesvos was chosen for the field research because the island has remarkable religious sites, churches, monasteries, chapels, Byzantine monuments, museums and archeological sites, having the potential to attract the interest of a large number of tourists- pilgrims and enhancing the development of religious tourism at national and mainly regional and local level. Over the centuries, monasteries and churches in Lesvos were powerful guardians of Greek culture and lesbian tradition, attracting pilgrims, making the island an important destination for thousands of pilgrims.

As stated by Poulaki et al. (2015: 6), *“religious tourism can be further strengthened internationally, since tourism destination regions, except religious monuments, also have other tourist resources”.*

2 Literature Review

2.1 Religious Tourism

Nowadays, it is estimated that nearly nine out of ten people belong to a religious group- community with a clear religious orientation (Pew Research Center 2012). According to the estimates of the World Tourism Organization, travel for religious reasons forms a tourist market, which accounts for more than 300 million tourists visiting the world’s key religious sites every year. In fact, religious tourism is associated with great economic and social importance at international level. This fact is implied by the large number of people who are faithful or religious and travel for religious reasons (Lagos and Christogianni 2006). As far as Christianity is concerned, it is worth noting that in 2010, Christians exceeded 2.1 billion people (Pew Research Center 2015). Accordingly, the Roman Catholic Church numbered 1 billion believers (approximately 50% of all Christians or 16% of the world’s population), and the Orthodox Church numbered around 260 million believers worldwide.

Like other forms of tourism, religious tourism influences the prosperity and economic development of tourist destinations and visit areas (Polyzos 2002). The development of religious tourism offers multiplier economic benefits for the reception areas (Moira and Paraschi 2015). These benefits are income growth, job creation, regional development, as well as interconnection with other sectors of local economy (Airey 1983; Hall 2000). In fact, the religious tourists after fulfilling their religious duties behave as typical tourists in the sense that they need accommodation, feeding services, local souvenirs etc. (Vukonic 1996). The economic benefits associated with religious tourism are greater than those associated with other forms of tourism, as pilgrims and other religious tourists are avid buyers of religious souvenirs (Fleischer 2000). The economic dimension of religious tourism and its potential for the development of certain areas has been a major concern for national tourism policies and many organizations or associations such as UNESCO and European Union (Lytras 2001).

Religious tourism essentially exploits and uses both the religious and cultural heritage of the past as well as the structures (infrastructures, special tourist infrastructures) that sprawl out of the sacred place of pilgrimage but are integrated into the urban environment where tourism activity develops (Coccossis and Tsartas 2011). However, the development of religious tourism requires the existence of an attractive religious resource, a satisfactory transport network to ensure accessibility, infrastructure and other structures (Moira and Paraschi 2015). Road safety and security is one of the concerns of pilgrims- visitors while they are traveling (Wilkis et al. 1999). Coccossis et al. (2011: 211) argued that *"the development of religious tourism in a destination presupposes the existence of a satisfactory transport network, as the transfer of the majority of the pilgrims is achieved by busses"*. The upgrade of the level of infrastructures for the access to religious monuments is a basic prerequisite for enhancing the tourist flows of religious tourism (Polyzos 2010). According to Syamala and Kakoti (2016: 115) "*the pilgrims want security of food, shelter and health as an important part of their pilgrimage"*. Vukonic (1998) recommended that infrastructure development is a very important parameter for meeting the needs of religious tourist. So, religious tourism shall not only be a blessing for local enterprises, but also rises the standard of living for the locals and contributes to the infrastructure development such as road connectivity, electricity etc. (Syamala and Kakoti 2016). It can be considered that the attractiveness of each Prefecture and the total number of its visitors are not shaped by the number of its own pilgrimages, but are influenced by various elements such as age, size, historical and religious references of the monasteries, churches, etc. (Polyzos 2010).

The abovementioned literature indicates a large number of tourists who are potential religious tourists, while the development of religious tourism offers significant economic and social advantages to local communities. Additional studies to understand more completely the factors that can enhance the development of religious tourism at local level are required.

2.2 Religious Tourism in Greece

According to the Hellenic Association of Travel and Tourist Agencies (HATTA), religious tourism in Greece is 85% internal tourism. So, a characteristic feature of religious tourism in Greece is that the majority of visitors are Greeks, while in recent years the number of visitors from abroad (mainly from Eastern Orthodox countries) has grown (Polyzos 2010). Similarly, in the context of trips with religious characteristics in Greece, Moira (2009: 174) emphasizes that *"districts of Macedonia attract a large number of tourists from the Orthodox neighboring countries as well as a number of tourists from the Orthodox republics of the former Soviet Union"*. At this point, it is worth mentioning that the majority of the Orthodox Christian tradition is associated with the Russian Orthodox Church, which lists 101,450,000 believers, reflecting 39% of the world Orthodox population and 50.6% of the Orthodox population of Europe (Pew Research Center 2011).

As throughout the western world, so in Greece, the pilgrim is a specific objective of the tourist industry, as it is estimated that only domestic tourists- visitors to religious monuments exceed 300,000 annually (Polyzos 2010). Pilgrims in Greece also tend to repeat their journey to a pilgrimage place and travel mainly between September and June, while 65 per cent of them travel with their families and prefer to travel in groups (HATTA 2012). The Greek pilgrims visit many Byzantine and post-Byzantine churches and monasteries usually by organized tours, made by a travel agency or various parishes (Poulaki et al. 2015). Similarly, Coccossis and Tsartas (2011: 206) claimed that "*religious tours are organized by travel agencies specializing in religious tourism and offering organized packages of specific duration"*.

In the organization of religious journeys, also, the Church seems to have a catalytic role since in many cases it is an intermediary and acts as a "tour operator" (Moira 2009). The Church's actions to promote the destinations of Greece with important religious resources, such as Lesvos, are realized through the conclusion of protocols with other Orthodox churches, the participation in international tourism exhibitions, the cooperation with the Greek Tourism Organization and by conducting events to strengthen relations with the Russian tourist market. In this direction, a joint committee for the development of religious tourism from the Ministry of Tourism and the Church of Greece attempts to promote religious tourism worldwide (Poulaki et al. 2015).

2.3 Religious Tourism in Lesvos

As reported by Polyzos (2017: 15) *"The gathering of remarkable religious monuments with particular attractiveness combined with the positive interdependence of holiday tourism and religious tourism has led to a significant increase in the number of visitors to the Region of the North Aegean in recent years"*. Nowadays, the Lesvos Prefecture hosts fourteen pilgrimages (Polyzos 2010). Religious tourism in the North Aegean Region can be developed outside the summer season, especially during the spring season, taking advantage of the Easter celebrations and a series of cultural events taking place (Polyzos 2017).

Regarding religious tourism in Lesvos, a recent research of Spilanis and Vayanni (2009: 183), expressed that "*the pilgrims are highly repeatable in their visits to Lesvos and that the number of their overnight stays is only slightly longer than 3 days, while, at the same time, they travel either individually or in organized groups, using the ship for their transfer to the island"*. In addition, the organized groups of pilgrims used excursion busses for their transportation into the island, while the individual pilgrims preferred taxis (Spilanis and Vayanni 2009). Accordingly, several of pilgrims spent their night in the monasteries of the island and in rental rooms, whose reservations did not include extra services and except of the visits to the monasteries, the pilgrims also visited beaches and museums.

3 Methodology

The methodology approach of this paper relates to the implementation of a field research, including the distribution of a structured—self-completed questionnaire to all priests of Lesvos. All the questions used were closed-ended and scale (5-point

Likert) questions have been employed, because they are credible in measuring people's perceptions (Davis et al. 1988; Oppenheim 1992). The first section of the questionnaire investigated the respondents' profile. Information gathered included gender, age, educational level, rank of priesthood and years of priesthood occupation. The second section, consisted of questions regarding the current situation of the development of religious tourism in Lesvos. Similarly, the third section consisted of questions exploring the potentials for the development of religious tourism in the island.

The survey was contacted in Lesvos, in February 2017, using the inventory method. A total of 134 questionnaires were distributed, of which 87 were answered (64.9% response rate). The main limitation of this research is that it focuses on the priests of Lesvos, who involved directly or indirectly with the development of religious tourism in the island and the results and conclusions of this survey are not subject to generalizations.

Statistical Package for Social Science (SPSS26) was used to analyze the data obtained. A reliability analysis of internal consistency was conducted, which mainly concerns Likert-type scale questions, in order to investigate whether the questionnaire used in the survey can produce results free from errors (Zafeiropoulos 2015). The Cronbach's coefficient alpha fell in the range of between 0.75 to 0.89 on questions which were used in the survey.

A descriptive analysis was used to examine the demographic profile and the responses of the priests in term of frequency, central tendency and dispersion. The inductive analysis focused on an Independent- Sample t-test to compare means of two different samples for a variable, in order to investigate whether the existence of a difference between the mean scores is statistically significant or not, but also to explore the following hypotheses of the current survey.

H1: Each variable of "Current Situation of Religious Tourism in Lesvos" is more highly valued by priests with a high level of specific demographic characteristics (Educational level, Priesthood and Years of Priesthood) than by priest with a low level.
H2: Each variable of "Evaluation of Lesvos as a Destination" is more highly valued by priests with a high level of specific demographic characteristics […] than by priest with a low level.
H3: Each "Promotion Tool" is more highly valued by priests with a high level of specific demographic characteristics […] than by priest with a low level.
H4: Each variable of "Benefits to the Local Community" is more highly valued by priests with a high level of specific demographic characteristics […] than by priest with a low level.
H5: Each "Strengthening Factor for the Development of Religious tourism in Lesvos" is more highly valued by priests with a high level of specific demographic characteristics […] than by priest with a low level.
H6: Each "Suspensive Factor for the Development of Religious Tourism in Lesvos" is more highly valued by priests with a high level of specific demographic characteristics […] than by priest with a low level.

H7: Each "New Market of Religious Tourism" is more highly valued by priests with a highlevel of specific demographic characteristics […] than by priest with a low level.

4 Results

4.1 Demographic Characteristics of the Priests

The majority of the respondents are male (84%), while 16% are female nuns living in the Holy monasteries of Lesvos. Regarding age, priests aged from 51 to 65 years are the largest group accounting for 65.5% of the sample, whereas the 36–50 years is the second largest age group accounting for 31% of all respondents. As for the educational level of the priests, the vast majority of them have no high school education (56.3%), while 42.5% of them received university education. Regarding the priesthood, 21.8% of the respondents is included in the first category (Monks, Nuns and Deacons) and 78.1% is belonged to the second category (Presbyters, Bishops and Archimandrites). As far as the years of priesthood is concerned, 47.1% declared up to 20 years and the remaining 52.9% more than 21 years. Finally, the participants stated that they have not received any education on tourism (96.5%) or any education in religious tourism (96.5%).

4.2 Current Situation of Religious Tourism Development in Lesvos

The views of the priests on the current situation of religious tourism in Lesvos, are summarized in Table 1. The Cronbach Alpha value (.75) indicates a high level of reliability. According to the findings, in all six statements that reflect the current situation of religious tourism in Lesvos, the mean scores are over 4.1, indicating a relative dynamic of religious tourism development in Lesvos. Regarding the current situation of religious tourism development in Lesvos, a t-test was undertaken in order to examine differences in responses due to the priests' educational level, priesthood and years of priesthood occupation. The results of t-test indicated that the overriding majority of them do not demonstrate differences ($p > .05$) in respondents' perception in the current situation of religious tourism in Lesvos, comparing to the levels of education, the years of priesthood and the two categories of priesthood rank. Consequently, H1 is rejected. Exceptions are the variables "Current level of religious tourism development in Lesvos" ($p = .007$) which shows differences between the different categories of "Years of Priesthood", but, also the "Desire for the development of religious tourism in Lesvos" ($p = .037$) and "Ability of Lesvos to support religious tourism" ($p = .028$) between the different categories of Priesthood.

Table 1 Current situation of religious tourism development in Lesvos

Variables	Mean	*p*-value*		
		Education level	Priesthood	Years of priesthood
Current level of religious tourism development in Lesvos	4.10	.790	.740	**.007**
Desire for the development of religious tourism in Lesvos	4.24	.575	**.037**	.563
Ability of Lesvos to support religious tourism	4.51	.485	**.028**	.622
Current contribution of religious tourism to the tourist development of Lesvos	4.16	.525	.153	.281
Positive attitude for the development of religious tourism in Lesvos	4.31	.468	.252	.373
Ability of religious tourism to contribute more to the tourist development of Lesvos	4.41	.469	.138	.520
Cronbach Alpha	0.75			

*.05 or less
Bold indicates the differences that arise from hypothesis testing, as a result of using the Independent Sample t-test

Priests' opinions about Lesvos' evaluation as a tourist destination are summarized in Table 2, which displays the mean scores in a descending order. The Cronbach Alpha value (.76) reflects a high level of reliability. From the mean values, it can be concluded that priests have a strong belief that Lesvos can be considered as exclusive destination of religious tourism at different periods of the year (4.25). In addition, it can be noticed that in three statements, the mean scores are around 3.9 indicating Lesvos as exclusive destination of religious tourism at specific periods of the year

Table 2 Evaluation of Lesvos as a tourist destination

Variables	Mean	*p*-value*		
		Education level	Priesthood	Years of priesthood
Exclusive destination of religious tourism at different periods of the year	4.25	.436	.251	.851
Exclusive destination of religious tourism at specific periods of the year (according to the Orthodox Calendar)	3.94	.417	.193	.617
Basic pilgrimage destination of the North Aegean Region	3.93	**.021**	.909	.575
Basic pilgrimage destination of Greece	3.92	.725	.833	.394
Tourist destination capable of responding to other interests of tourists with the emergence of special and alternative forms of tourism	3.72	.392	.754	.654
Cronbach Alpha	0.76			

*.05 or less
Bold indicates the differences that arise from hypothesis testing, as a result of using the Independent Sample t-test

and a basic pilgrimage destination of the North Aegean Region and Greece. The results of the t-test indicate that, there are no differences in respondents' statements on how Lesvos is evaluated as a tourist destination ($p > .05$) between the two levels of education or priesthood or even the two groups of the years of priesthood exercise. Consequently, H2 is strongly rejected, except the evaluation of Lesvos as pilgrimage destination of the North Aegean Region between the two level of priests' education ($p = .021$).

Priests' opinions on the benefits that the local community can gain from the development of religious tourism are depicted in Table 3. Over half of the priests' stated that local community can obtain economic benefits, while a significant level of participants' responses (31%) considered that the development of religious tourism in Lesvos could bring more cultural benefits to the local community. On the other hand, the environmental benefits accounted only a small percentage (4%) of participants' preference. Regarding the benefits to the local community, that-test indicates that the variables under consideration do not show differences between the two levels of education, the two groups of the year of priesthood exercise and the levels of Priesthood. Consequently H3 is rejected. The only exception is the variable "Social benefits through the upgrading of public and private sector services", which displayed statistically significant difference between the two levels of education ($p < .001$).

Taking into consideration that the promotion of religious tourism in Lesvos is the result of the methods used by each sector involved directly or indirectly with the

Table 3 Benefits to the local community

Variables	Percent %	*p*-value*		
		Education level	Priesthood	Years of priesthood
Economic benefits to the local enterprises (restaurant, hotels, shops)	36.8	.891	.273	.708
Cultural benefits through the restoration, conservation, protection and promotion of sacred monuments of Lesvos	22.4	.191	.200	.792
Economic benefits through job creation for the local population	15.5	.924	.954	.559
Social benefits through the upgrading of public and private sector services	9.2	**.000**	.097	.802
Cultural benefits through the preservation of customs and contact with the feasts of the Christian tradition of Lesvos	8.6	.380	.852	.969
Environmental benefits via protection and conservation of natural resources	4.0	.407	.619	.585
Social benefits through the upgrading of existing infrastructures	3.4	.171	.184	.124

*.05 or less

Bold indicates the differences that arise from hypothesis testing, as a result of using the Independent Sample t-test

Table 4 Promotion Tools

Variables	Mean	*p*-value*		
		Education level	Priesthood	Years of priesthood
Synergies with ecclesiastical sectors	4.67	.080	.795	.590
Printed material (guides—maps of religious sites, tour leaflets, brochures, diaries, etc.)	3.98	.661	.660	.344
Websites	3.87	.711	.883	.515
Presence at the media (Broadcasts, Travelogue etc.)	3.78	.554	.855	.728
Presence at national tourism exhibitions and conferences	3.08	.551	.390	.587
Presence at international tourism exhibitions and conferences	3.01	.401	.788	.231
Cronbach Alpha	0.89			

*.05 or less

development of religious tourism in the island, the promotion tools used by the ecclesiastical sector were examined. The Cronbach Alpha value (.89) indicates a high level of reliability for the internal consistency of the attachment scale. The mean scores of the variables for each promotion tool, as formulated by the responses of the priests, ranged from 3.01 to 4.67. In particular, the variable with the largest mean (4.67) concerned the Synergies with ecclesiastical sectors, followed by the distribution of printed material with references to the religious sites of Lesvos (3.98) and the wide use of web pages (3.87). The presence in national tourism exhibitions and conferences or similarly international ones are reported as the variables with the smallest mean score (3.08 and 3.01 respectively). The results of t-test showed that none of the promotional tools variables have been evaluated more by priests with a high level of education or a high rank of priesthood, or even by priests who exercised from 21 years and over ($p > .05$). H4 is consequently rejected (Table 4).

The increase in the pilgrimage flows in Lesvos can be achieved through the constructive cooperation between the stakeholders involved, the upgrading of transport to religious monuments and the upgrading of infrastructure for the purpose of staying and feeding pilgrims in monastic complexes (Mouratidis et al. 2017). According to the respondents, the collaboration between the sectors involved and the upgrade of monastic complexes infrastructure accrue the higher percentage (29.3% and 26.4% respectively) between the strengthening factors for the development of the religious tourism in Lesvos. As stated by Nicolaides (2014: 14) *"α well planned strategic long-term approach involving all stakeholders is needed together with a coordinated management of all the relevant components which make a destination appealing"*. On the other hand, the difficulty in approaching the monuments of religious interest and the inability of a constructive cooperation between the stakeholders recorded the higher percentage (25.3% and 22.4% respectively) and recognized as the most negative factors for the enhancement of

Table 5 Strengthening factors for the development of religious tourism in Lesvos

Variables	Percent %	*p*-value*		
		Education level	Priesthood	Years of Priesthood
Collaboration between the sectors involved in the development of religious tourism in Lesvos	29.3	**.039**	.554	.656
Upgrading infrastructures for overnight staying and feeding pilgrims in monastic complexes	26.4	.641	.128	.323
Upgrading the transportation to religious monuments	15.5	.408	.954	.740
Specialized projection and advertising of the religious image of Lesvos	12.1	.278	.726	.347
Attracting new tourist markets of religious tourism	10.3	.650	.499	.801
Promotion of an organized network of information and guided tours in religious places	6.3	.443	.062	.246

*.05 or less

Bold indicates the differences that arise from hypothesis testing, as a result of using the Independent Sample t-test

the religious tourism in Lesvos (Table 5). Regarding the strengthening factors, the t-test suggests that there are not significant differences among the mean scores on these six dependent variables for the priests' educational levels, priesthood and years of priesthood exercise ($p > .05$), consequently H5 is rejected. Exception is the mean score of the "Collaboration between the sectors involved in the development of religious tourism in Lesvos" which is considered significantly higher by priests with a high level of education than by priests with a low educational level (.039).

Similarly, in the matter of the suspensive factors, H6 cannot be accepted for the majority of the variables ($p \geq .05$), with the exception of "Difficulty in approaching the monuments of religious interest", ($p = .005$) and the "Lack of cooperation with religious tourism agencies (inside and outside of Greece)" ($p = .049$), which have been evaluated mainly by priests with a high level of priesthood (Table 6). A recent research of Petreas (2016) showed that that only 15% of the Holy Metropolises of Greece had cooperated with authorities or agencies to develop or promote sacred pilgrimages, mainly for the rehabilitation or renovation of sacred monuments.

Regarding the new religious tourism markets, the priests of Lesvos showed their preference for the emerging markets of the same religion (Balkan countries, Cyprus, Russia and the former Soviet Union countries) (Table 7). In a similar way, according to the t-test, the priests' educational levels, priesthood and years of priesthood exercise suggests that there are no significant differences between those categories and H7 is rejected.

Table 6 Suspensive factors for the development of religious tourism in Lesvos

Variables	Percent %	*p*-value*		
		Education level	Priesthood	Years of priesthood
Difficulty in approaching the monuments of religious interest	25.3	.070	**.005**	.336
Inability of a constructive cooperation between the stakeholders	22.4	.679	.804	.490
Insufficient promotion of the religious sites of Lesvos	12.6	.495	.908	.247
Lack of cooperation with religious tourism agencies (inside and outside of Greece)	10.9	.718	**.049**	.625
Lack of strategic planning for the development of religious tourism in Lesvos due to the lack of specialized executives	8.6	.413	.121	.244
Lack of an organized network of information and guided tours in religious sites	8.6	.800	.852	.602
Problems in the infrastructure of the monastic complexes	6.3	.606	.757	.907
Failure to attract Community funds and consequently to implement approved programs, such as digitization of the island's religious wealth	5.2	.962	.977	.598

*.05 or less

Bold indicates the differences that arise from hypothesis testing, as a result of using the Independent Sample t-test

Table 7 New markets of religious tourism

Variables	Percent %	*p*-value*		
		Education level	Priesthood	Years of priesthood
Cyprus	35.6	.144	.162	.568
Balkan countries (Serbia, Bulgaria, Romania etc.)	35.1	.116	.857	.296
Russia and former Soviet Union countries (Belarus, Ukraine, Georgia etc.)	26.4	.698	.592	.774
China	1.7	.123	.357	.098
United States of America	1.1	.857	.455	.133

* .05 or less

5 Conclusion

The present findings confirm that religious tourism in Lesvos can contribute dynamically to the tourist development of the island and provide significant benefits to the local community, especially during spring, where in Lesvos, on the occasion of the Easter celebrations of the Orthodox Christian faith, various mysteries and festivals take place. Religious tourism allows visitors to become witnesses and contributors in the religious and historical memory of the host community (Nicolaides 2014). Results provide a basis for the determinants that enhance or hinder the development of religious tourism in Lesvos. The findings, which reflect the plurality of the views of the priests of Lesvos, demonstrated to a significant extent the lack of cooperation between the stakeholders involved in the exploitation of the comparative advantages of numerous religious monuments of the island and the absence of a single long-term strategic planning for the strengthening of religious tourism in Lesvos. The research findings proved that the ecclesiastic sector of the island have common perceptions about the current situation of the religious tourism in Lesvos, thus operating as a solid body in enhancing religious tourism at a local level.

This paper argued that an organized tourism policy framework that would contribute to the further increase of pilgrimage tourist flows in Lesvos could include three basic parameters. The analysis suggested that the first parameter to enhance religious tourism in Lesvos concerns the situation of the island's existing religious sites and should include the preservation and protection of the religious heritage of Lesvos, as well as the promotion of monuments of religious interest in terms of sustainability. This aspect of our research suggested the upgrading of the hospitality infrastructure of the monastic complexes for the purpose of overnight staying and feeding the pilgrims, as well as the improvement of the ways of transportation towards the monuments of religious interest. Thus, it is imperative that local services and infrastructural development support the idea of sustaining religious pilgrimage tourism (Nicolaides 2014). The second parameter should focus on the specialization of the stakeholders involved in the development of religious tourism in Lesvos. On this basis, cooperation between the stakeholders involved is required and it is imperative to educate both priests and executives from the public and private sectors through their attendance in national and international conferences and seminars on the development of religious tourism at national and international level. The last parameter includes the appropriate ways of promoting religious tourism in Lesvos, mainly in Greece but also abroad. In this context, the inclusion of Lesvos on the map of the Mediterranean regions, which are suitable for the hosting and the organization of theological conferences, congresses and events, is expected to attract a significant number of tourists-pilgrims. Similarly, the participation of the involved stakeholders, in national and international tourism exhibitions and conferences with consequent exploitation of contacts is proposed. On this basis, the two Holy Metropolises of Lesvos should collaborate with other Holy Metropolises of Greece and Orthodox churches of the Hellenic expatriation to organize excursion packages from these countries to Lesvos. In this direction, the cooperation of the two Holy Metropolises with Churches of Orthodox countries is still reasonable, in order to achieve the increase of religious tourism flows from countries with the same dogma. Furthermore, in order to increase the religious tourism demand, in Lesvos, the search for cooperation with specialized agencies of religious tourism both domestically and abroad is also required along with the cooperation with national and regional institutions and organizations, responsible for the development of alternative forms of tourism (Stavrinoudis and Parthenis 2009).

Based on the literature review, it is obvious that the increase in pilgrimage flows can be achieved in a destination with a great historical, cultural and religious heritage. The cultural identity of Lesvos and the deep religious tradition of the inhabitants of the island make Lesvos one of the most suitable destination for the development of religious tourism. In this direction, the additional advantage of the current survey is that it highlights the need for the implementation of an integrated strategic planning for local tourism development, which through targeted actions will cover the basic strategic directions for the development of religious tourism in Lesvos. Ideally, the findings of this research should be replicated in a broader research where will be focus on the development of religious tourism in Lesvos with the participation of more stakeholders, thus allowing them to offer their view. Looking forward, further attempts for the exploration of the potential and prospects for the development of religious tourism at a local level could provide quite beneficial to the literature.

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Chapter 12
Dark Tourism, the Dark Side of Cultural Tourism. Application to the City of Porto

Dália Liberato, Pedro Liberato and Andreia Gonçalves

Abstract Dark Tourism represents an extension of cultural tourism, once it was necessary to innovate this tourism typology justified by a decrease in demand. This change, was verified in the tourist experience level, that is, to provide unique moments in the cultural level, through the experience, so that it could be the option for a greater number of tourists in the destination. Dark Tourism sites include concentration camps, inactive prisons, serial killers homes, cemeteries, and all other venues that meet the standards of death, tragedy and suffering (Biran et al. 2011; Braithwaite and Lee 2006; Dunkley et al. 2011; Kang et al. 2012; Light 2016, 2017; Podoshen 2013; Podoshen et al. 2015; Stone and Sharpley 2008, 2009; Stone 2012; Yan et al. 2016; and Zhang et al. 2016). In Portugal there are some sites associated with the practice of Dark Tourism, although this is not yet sufficiently explored. The main objective of this investigation is the evaluation of Dark Tourism potential in the city of Porto. Partial objectives are: proving the existence of a market niche in Porto associated to Dark Tourism; understand if the city of Porto has tourism resources and tourism demand, able to develop a tourism experience within the Dark Tourism offer; and to sensitize the Destination Management Organizations (DMO's) in Porto to the opportunity of this market, through 178 questionnaires, applied to tourists/visitors in the city of Porto. This research confirmed some objectives, variables and proposed fields.

Keywords Porto · Dark tourism · Thanatourism · History · Culture · Destination · Management · Organizations

JEL Classification Z32

D. Liberato (✉) · P. Liberato
School of Hospitality and Tourism, Polytechnic Institute of Porto, Vila do Conde, Portugal
e-mail: dalialib@esht.ipp.pt

A. Gonçalves
Porto Accounting and Business School, Polytechnic of Porto, Porto, Portugal

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1 Introduction

The tourism sector has gained great prominence in Oporto region, as a strong promoter of economic activity, supported by its historical, cultural and natural as well as architecturalheritage. This region has attracted more national and international visitors (Turismo do Porto e Norte 2015). According to the European Best Destinations organization, Porto was chosen in 2017, for the third year, as the best European destination among 20 countries, having surpassed cities such as: Milan, Athens, Vienna, Madrid, Rome and Paris. Porto is seen as an exceptional city, more than an "invicta" and historical city, and it's associated with architecture, culture, gastronomy, commerce, meetings and discoveries. Regarding the tourist offer, Porto region represents about 70% of the total demand in the Northern region of Portugal. The main emitting markets to Porto were, in 2016, Spain, France. Brazil, Germany and the United Kingdom. In the same year, Porto registered around 1426,863 tourists, corresponding to a recorded overnight stays of approximately 2833,406.

Dark Tourism represents an extension of cultural tourism, once it was necessary to innovate this tourism typology justified by a decrease in demand. This tourism is classified by the search of places where, once, catastrophes, suffering and death occurred, in order to satisfy the curiosity of those who survived. This article intends to emphasize the importance of Dark Tourism in the city of Porto, as an extension of the cultural offer, from tourist resources and attractions associated with specific historical moments of the city, related to death, torture, invasions, which constitute themselves as important episodes that must be interpreted from the cultural point of view. According to Sharpley and Stone (2009), dark tourists are often motivated by a new experience or an adventure to gain knowledge and understand unknown historical facts, but relevant in the visited destination, which makes relevant, for the tourist experience the interpretation, according to Moscardo and Ballantyne (2008) as a key component in tourism experience evaluation, responsible, in the opinion of Sharpley and Stone (2009) for the tourist's route between place, history and its heritage. This important strategy, applied to these resources, allows destinations, and tourists in particular, to write or rewrite the history of people'slives and deaths, and provide individual political interpretations of past events, according to Sharpley and Stone (2009), and also provoking those being informed (Tilden 1977).

The main objective of this investigation is the evaluation of Dark Tourism potential in the city of Porto. Partial objectives are: proving the existence of a market niche in Porto associated to Dark Tourism; understand if the city of Porto has tourism resources and tourism demand, able to develop a tourism experience within the Dark Tourism offer; and to sensitize the Destination Management Organizations (DMO's) in Porto to the opportunity of this market.

This paper is divided in three parts. The literary review emphasizes the different approaches to the definition of Dark Tourism, the different motivations for visiting dark tourism destinations, as well as the importance of historical-cultural perspective in the framework of this typology. In the tourism destination research methodology, the choice of Porto as a destination and the methodology of data collection are justified, and the results of the research are presented and discussed. The conclusion discusses the innovative perspective introduced in the analysis of the subject investigated and the results obtained, regarding the evaluation of the tourism experience and the management of the destination, concerning Dark Tourism.

2 Dark Tourism

After a research on the subject in question, it is noticed that the researchers are not unanimous in the denomination of the touristic aspect of the Dark Tourism. According to Foley and Lennon (1996), Dark Tourism is the most suitable name for this typology, contrary to the opinion of Seaton (1996) which describes it as Thanatourism (thanatology is the name of the scientific study concerning death). Rojek (1993) considers Black Spot Tourism to be the most appropriate name although Tunbridge and Ashworth (1996) consider that the best option will be Atrocity Heritage Tourism, in addition to Morbid Tourism presented by Blom (2000). Considering that the designation of Dark Tourism is the most used in scientific papers, it will be discussed in the present investigation, applied to the city of Porto. Stone (2006), considers Dark Tourism as the act of traveling to places associated with death, suffering and macabre, apparently, presenting linkages with human misery: war-related attractions, war commemorations, and war museums, representing a subset of the totality of tourist sites associated with death and suffering. According to Podoshen (2013) the tourist of black metal tries to find places of his imagination, mainly looking for places where there were homicides, concentration camps and places where there was terrorism or natural catastrophes, being motivated by new experiences and adventures, for individual cultural enrichment. Other sites associated with the practice of Dark Tourism are the museum prisons namely: Robben Island, located in South Africa (Strange and Kempa 2003), Alcatraz Prison in San Francisco, California, Eastern State Penitentiary in Philadelphia, Pensilvania and Louisiana State Prison located in the state of Louisiana (Loo and Strange 2000). Henderson (2000) Lennon and Foley (2000) also state that Dark Tourism offers two distinct experiences, emotional and educational, in agreement with Braithwaite and Lee (2006) adding that these activities can also be therapeutic. Prior to this concrete study of the motivations of Dark Tourists, Stone and Sharpley (2008), considered the consumption of Dark Tourism a very complex process, which was not studied in the existing literature. These authors pointed out that whoever did it, was for personal significance reasons, and the practice of this tourism could have more to do with life and to live, rather than death and dead. On the other hand, according to the Auschwitz case study (Biran et al. 2011), the main motivation, demonstrated in the literature on the subject, emphasizes the fascination with death as the main (and perhaps only) reason to visit these places. The results shows that the reasons for visiting Auschwitz are similar to those of a regular visit to non-Dark cultural tourism.

Another very influential example in Dark Tourism is the Chernobyl nuclear disaster, according to Yankovska and Hannam (2013), once as soon as security standards were installed, it began to attract the attention of tourists, tour guides, tour operators and agencies. This focus is fundamentally due to the suffering caused by the disaster and also the curiosity in trying to understand how and where the historical facts happened. This event and similar ones, according to the same authors, draws attention to a specific type of Dark Tourism, called toxic tourism, due to its peculiarities. In addition to the places mentioned, there are other places of worship to the dead, also visited by tourists, such as cemeteries or chapels, according to Young and Light (2016). To Mahrouse (2016) the places where wars and political conflicts occured, are also emblematic sites of Dark Tourism, since the tourist seeks to confirm and witness the information provided by the media about these events. According to Sharpley (2009), one of the earliest events in the history of Dark Tourism, happened in August 1930, involved a luxury boat that crashed, and the result was a new tourist attraction. Seaton and Lennon (2004) assert that the demand for Dark Tourism has been increasing from the mid-twentieth century to the present, which justifies the conclusions of Henderson (2000) and Ryan (2007) when they observe the increase in the number of travel agencies and tourism, providing packages and information related to Dark Tourism. According to Stone (2012), the experience of Dark Tourism is theoretically characterized as a reflective process to help build the meaning of mortality, and the visit provides a physical place to connect the living with the dead. There are also new studies referring that Dark Tourism isn't only linked to morbid, tragic and suffering-related events. The latest research of Light (2017) states that the Dark Tourism is a mixture of several sub-themes, depending on the interests of those who study, including history, psychology, literature, noting that the main focus is on the social sciences, particularly aimed for death. This recent conclusion underscores the importance of boosting cultural tourism and justifies the fact that it has begun to address the theme with the creativity relevance.

New investigations have recently appeared, based on internet usage. According to Krisjanous (2016), Web 2.0 has a great capacity for disseminating information to tourists, because being able to know more about certain places, they canaccess different cultures and perceive what is accepted and rejected, which is crucial to respect the local culture and susceptibilities, observing that the websites usually gather efforts to that effect.

Dark Tourism is a relatively new phenomenon in the tourism industry and is still in an initial phase of investigation and analysis of the various opportunities of approach and relationship with different scientific and cultural areas of society. After analyzing the concept of Dark Tourism, it's possible to observe that the tourist interested in this type of tourism doesn't follow a specific line, that it can be generalized. However, usually those who seek these places have a high cultural level. Although in some literature it's mentioned that only the black metal tourist seeks these sites, according to Stone and Sharpley (2009) most of these tourists are attracted essentially by the curiosity to see a place where there was once a tragic event. The literature review reveals that this kind of tourism should be directed to potential tourists with high academic degree, eager for knowledge and discovery, attentive to details and with a significant curiosity regarding morbid places, where once there were tragic events, particularly involving deaths.

In 2017 was celebrated the 150th anniversary of the abolition of the death penalty in Portugal, which means that in the past centuries, many people have been sentenced to death. The "Portuguese gallows" was used to condemn these people, who, unlike the "English gallows", did not immediately kill the condemned man, leaving him to suffocate for a few minutes so that he suffered more. The aim wasn't to kill immediately but cause suffer before dying. All this process, at that time, was considered as a spectacle. The journey, in Oporto, began in front of the old Cadeia da Relação (Oporto Prision), from where the inmates left, who walked barefoot in a kind of "procession" for all to see and to be submitted to this public shame. They returned to the present Hospital of Santo António and finished this route in the field of the mother country martyrs (current cordoery garden), where were the gallows, and they would lose their lives. There was a gallowsand stairs for each damned. They were hanged in their own attire and their heads covered. The executioner pushed them off the stairs so they would die slowly, and give more show time to whoever was watching. After a few minutes if they were still alive, the executioner would pull them out so they would die from aspine fracture. The story doesn't stop here, after all this, the bodies were beheaded and the heads were placed at their families homes doors. That's what happened to Brito e Cunha, who today has his name on a street in Matosinhos, in his honor. After that, the bodies that were not claimed by the families, were deposited in the common grave of the Prado do Repouso cemetery. It should be noted that this spectacle only happened because of political crimes. The rest were only murdered without this entire wraparound spectacle. Considering this morbid tradition, that fits perfectly with the Dark Tourism standards, an itinerary is proposed, called the itinerary of the executions: beginning in Cadeia da Relação (where the political prisoners came from), continuing by the Santo António Hospital, as the shame circuit that the inmates performed barefoot, continuing by field of the country martyrs (Mártires da Pátria) where the execution ceremonies began, ending at Prado do RepousoCemetery.

According to Sharpley and Stone (2009) this interpretation is responsible for the tourist's circuit regarding the meaning of place, history and its heritage.

3 Methodology

A quantitative approach was considered appropriate for the research methodology. A survey was used as the data collection technique for this investigation.

Based on the studies of Biran et al. (2011), Blom (2000), Dann (1998), Dunkley et al. (2011), Kim (2014), Kang, et al. (2012), Lennon and Foley (2000), Light (2016), Light (2017), Loo and Strange (2000), Poade (2015), Podoshen (2013), Podoshen et al. (2015), Seaton and Lennon (2004), Stone and Sharpley (2008), Stone and Sharpley (2009), Strange and Kempa (2003), Tung and Richie

Table 1 Sample technical data

Geographical scope	Porto City
Sample size	178 valid questionnaires
Maximum error	Error (B) = 7.3%
Trust level	95%
Data collection method	Direct or non-probabilistic sampling: by convenience
Data collection period	August 2017

Source Compiled by the authors

(2011), Yan et al. (2016), Zhang et al. (2016), Yankovska and Hannam (2013), Young and Light (2016), Stone (2012), and Mahrouse (2016) it was defined as the main objective of this investigation, the evaluation of the Dark Tourism potential as a theme in itself applied to the Oporto destination. As a result of this main objective, some partial objectives are presented:

- To prove, through this study, the existence of a market niche, in Porto, associated with Dark Tourism;
- To understand if the city of Porto has tourism resources and tourist demand, able to develop a tourist experience within the scope of Dark Tourism, that is, understand if the tourism experience in Porto, regarding Dark Tourism, is valued by the dynamization and dissemination of existing resources.
- To sensitize the Destination Management Organizations in Porto (DMO's) to this market opportunity.

For the survey application methodology, a direct or non-probabilistic sampling method was used. The data were collected in the city of Porto during the month of August 2017. Within the methods of directed or non-probabilistic sampling, the convenience sampling method was used, in which the sample is selected according to the availability of the elements of the target population. Using a trust level of 95%, to a 14,26,863 tourists population and a sample size of 178 elements, we achieve anerror (B) of 7.3%. With the same trust level of 95%, if we consider as the population, tourists in August (152,067), a sample size of 178 elements, we get the same value for the error(B) of 7.3%, as shown in Table 1.

4 Results

In order to characterize the tourist profile in Porto, as well as its knowledge, regarding the Dark Tourism subject, the survey application occured in São Bento and Campanhã train stations, and Flores Street. Regarding the socio-demographic profile of the respondents, the data collected in Table 2 show that the age group with the largest representation in the sample is 25–34 years old, mostly of international origin (93%), highlighting England, France, USA, Denmark and Scotland (Fig. 1).

Table 2 Respondents Characterization

Gender	Frequency		%
	Male	77	43.3
	Female	101	56.7
	Total	178	100.0
Age (years)		Frequency	%
	Between 14 and 18	21	11.8
	Between 18 and 24	31	17.4
	Between 25 e 34	58	32.6
	Between 35 e 44	25	14.0
	Between 45 e 54	18	10.1
	+55	25	14.0
	Total	178	100.0
Qualifications		Frequency	%
High school		58	32.6
Middle course		20	11.2
Higher education or equivalent		100	56.2
Total		178	100.0
Gross monthly income (individual)		Frequency	%
Less than 1000€		41	23.0
	1001–2000€	42	23.6
	2001–3000€	21	11.8
	More than 3000€	27	15.2
	NA	47	26.4
	Total	178	100.0

Source Compiled by the authors

The level of gross monthly income is medium, given that 27% have a value higher than €2000 per month. Regarding their level of education, 56% said they had a university or equivalent degree, which indicates a high educational level in relation to the tourist demand in the region.

The results obtained allow us to perceive those who value Porto as the destination of Dark Tourism and identify the characteristics of Dark Tourism associated with the offer of thematic products—Dark Tourism—in Porto.

There are statistically significant positive relationships between (Table 3):

– "Visit areas of natural disasters: earthquakes, tsunamis, …" and "Heavy environment"; "Attraction with places related to death (Rome Coliseum, Concentration camps, Christ Crucifixion, Medieval Executions),…" and "Heavy environment", which means that whoever agrees morethat "Dark Tourism" consists of visits to areas of natural disasters and attraction for places related to death, attaches greater importance to heavy environment as a characteristic in choosing a morbid destination.

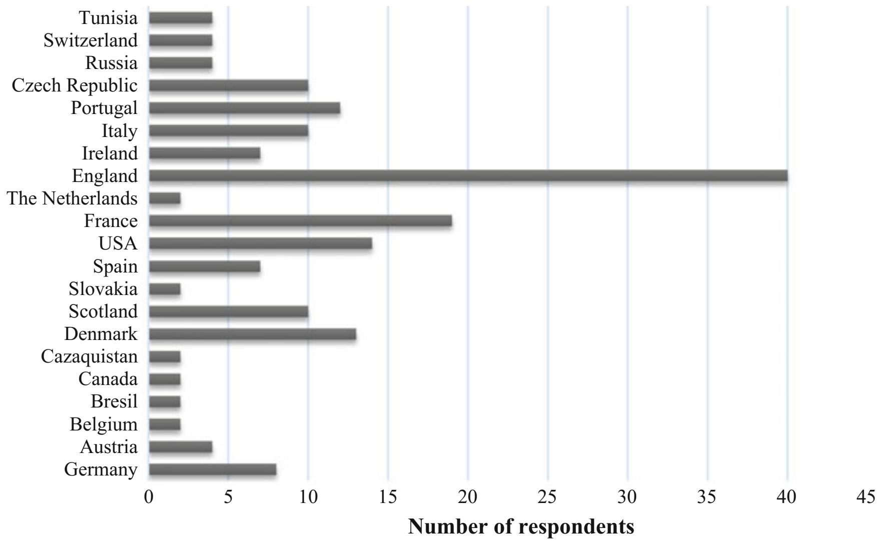

Fig. 1 Nationality *Source* Compiled by the authors

Table 3 Pearson's Correlation: Relationship between "In your opinion, "Dark Tourism" consists in:" and "How do you rate the following characteristics when choosing a morbid destination?"

N = 178		Heavy environment	Bloody history	Witness historical facts
Visit areas of natural disasters: earthquakes, tsunamis, …	Correlation coef.(r) Proof of value(p)	0.541(**) 0.006	−0.181 0.396	−0.359 0.085
Visit areas where disasters occurred with human origin: Ground Zero, Concentration camps, …	Correlation coef.(r) Proof of value(p)	−0.089 0.679	0.075 0.727	−0.024 0.910
Association to past events, referring to the memory of such facts as murders	Correlation coef.(r) Proof of value(p)	−0.216 0.311	0.232 0.276	0.308 0.143
Attraction with places related to death (Rome Coliseum, Concentration camps, Christ Crucifixion, Medieval Executions), …	Correlation coef.(r) Proof of value(p)	0.524(**) 0.009	−0.416 (*) 0.043	−0.037 0.865
Related to places of violent death and the valuation of human life.	Correlation coef.(r) Proof of value(p)	0.039 0.857	0.145 0.498	−0.176 0.411

P—significance level** p < 0.01, * p < 0.05; *Source* Compiled by the authors

There is a statistically significant negative relation between (Table 3):

– “Attraction by places related to death (Roma Coliseum, concentration camps, Christ Crucifixion, Medieval Executions),…” and “Bloody History” which means that whoever agrees more that “Dark Tourism” consists of attraction for places related to death assigns less importance to the bloody history as characteristic in choosing a morbid destination.

Regarding Table 4, the proof value is higher than 5% for all questions, the null hypothesis is not rejected, so there are no statistically significant differences between those who think that Porto offers “Dark Tourism” and who do not think so. In the sample, the agreement with “Visit to areas of natural disasters: earthquakes, tsunamis,…”, “Attraction by places related to death (Rome coliseum, Concentration camps, Christ crucifixion, Medieval performances),…” and “Related to places of violent death and the valuation of human life” is superior for those who think that Porto offers “Dark Tourism”; the agreement with “Association to past events, referring to the memory of such facts as murders” is higher for those who think that Porto doesn’t present offer of “Dark Tourism”; and the agreement with “Visit areas where disasters occurred with human origin: Ground Zero, Concentration camps, …” is similar for both groups, however, the observed differences are not statistically significant.

In Table 5, the proof value is higher than 5% for all questions, the null hypothesis is not rejected, so there are no statistically significant differences between the three resources. In the sample, agreement with “Visit areas of natural

Table 4 Descriptive Statistics and Mann-Whitney Tests: Relationship between “In your opinion, “Dark Tourism” consists in:” and “Do you think Porto has a “Dark Tourism” offer”?

		N	Average	Standard deviation	U Mann-Whitney	p
Visit areas of natural disasters: earthquakes, tsunamis, …	Yes	60	3.50	1.690	60.0	0.801
	No	118	3.44	1.315		
Visit areas where disasters occurred with human origin: Ground Zero, Concentration camps,…	Yes	60	3.75	.886	62.0	0.898
	No	118	3.75	1.000		
Association to past events, referring to the memory of such facts as murders	Yes	60	2.88	1.246	43.5	0.182
	No	118	3.56	.964		
Attraction with places related to death (Rome Coliseum, Concentration camps, Christ Crucifixion, Medieval Executions),…	Yes	60	4.25	.707	48.0	0.299
	No	118	3.88	.885		
Related to places of violent death and the valuation of human life.	Yes	60	4.38	1.061	55.0	0.539
	No	118	4.31	.793		

Source Compiled by the authors

Table 5 Descriptive statistics and Kruskal-Wallis tests (KW): Relationship between "In your opinion, "Dark Tourism" consists of:" and "What resources do you associate in Porto with Dark Tourism?"

N = 178		N	Average	Standard deviation	KW	p
Visit areas of natural disasters: earthquakes, tsunamis, …	Cemetery of Agramonte, Prado do Repouso and Lapa	149	3.45	1.36	0.32	0.853
	Cemetery of Jews	14	3.00	2.83		
	Cadeia da relação (Jail)	15	4.00	1.41		
Visit areas where disasters occurred with human origin: Ground Zero, Concentration camps,…	Cemetery of Agramonte, Prado do Repouso and Lapa	149	3.70	0.98	1.56	0.459
	Cemetery of Jews	14	4.50	0.71		
	Cadeia da relação (Jail)	15	3.50	0.71		
Association to past events, referring to the memory of such facts as murders	Cemetery of Agramonte, Prado do Repouso and Lapa	149	3.35	1.04	1.40	0.497
	Cemetery of Jews	14	4.00	0.00		
	Cadeia da relação (Jail)	15	2.50	2.12		
Attraction with places related to death (Rome Coliseum, Concentration camps, Christ Crucifixion, Medieval Executions),…	Cemetery of Agramonte, Prado do Repouso and Lapa	149	4.00	0.86	1.44	0.487
	Cemetery of Jews	14	4.50	0.71		
	Cadeia da relação (Jail)	15	3.50	0.71		
Related to places of violent death and the valuation of human life.	Cemetery of Agramonte, Prado do Repouso and Lapa	149	4.40	0.75	0.34	0.842
	Cemetery of Jews	14	3.50	2.12		
	Cadeia da relação (Jail)	15	4.50	0.71		

Source Compiled by the authors

disasters: earthquakes, tsunamis,, …" is superior for those who refer "Cadeia da relação (Jail)" and lower for those who refer "Cemetery of Jews"; the agreement with "Visit areas where disasters occurred with human origin: Ground Zero, Concentration camps,…", "Association to past events, referring to the memory of such facts as murders" and "Attraction with places related to death (Rome Coliseum, Concentration camps, Christ Crucifixion, Medieval Executions),…" is superior for those who refer "Cemetery of Jews")" and lower for those who refer "Cadeia da relação (Jail)"; the agreement with "Related to places of violent death and the valuation of human life." islower for those who refer "Cemetery of Jews", however, the observed differences are not statistically significant.

Concerning Table 6, there are statistically significant positive relationships between:

- "Attraction with places related to death (Rome Coliseum, Concentration camps, Christ Crucifixion, Medieval Executions),…" and "Partially corresponds to the expectations and for this reason I am satisfied with my tourism experience".
- "Attraction with places related to death (Rome Coliseum, Concentration camps, Christ Crucifixion, Medieval Executions),…" and "It corresponds to expectations and for this reason I am completely satisfied with my tourism experience".

Table 6 Pearson's Correlation: Relationship between"In your opinion, "Dark Tourism" consists of:" and "Dissemination of the offer of products related to "Dark Tourism"

N = 178		Partially corresponds to the expectations and for this reason I am satisfied with my tourism experience	It corresponds to expectations and for this reason I am completely satisfied with my tourism experience	It is scarce or nonexistent and for this reason I am not satisfied
Visit areas of natural disasters: earthquakes, tsunamis, …	r	0.342	0.382	−0.199
	p	0.102	0.066	0.350
Visit areas where disasters occurred with human origin: Ground Zero, Concentration camps,…	r	0.310	0.341	0.075
	p	0.141	0.103	0.727
Association to past events, referring to the memory of such facts as murders	r	−0.235	−0.073	−0.304
	p	0.269	0.736	0.148
Attraction with places related to death (Rome Coliseum, Concentration camps, Christ Crucifixion, Medieval Executions), …	r	0.521(**)	0.569(**)	0.341
	p	0.009	0.004	0.103
Related to places of violent death and the valuation of human life.	r	−0.180	−0.130	−0.251
	p	0.401	0.544	0.237

** $p < 0.01$ * $p < 0.05$ *Source* Compiled by the authors

Which means that whoever agrees more that the “Dark Tourism” consists of attraction for places related to death, agrees more also that “Partially corresponds to the expectations and for this reason I am satisfied with my tourism experience”.

According to Table 7, the proof value is less than 5% for “Attraction with places related to death (Rome Coliseum, Concentration camps, Christ Crucifixion, Medieval Executions),…”, rejecting the null hypothesis and accepting the alternative, so there are statistically significant differences between those who think that if there was more supply and promotion, there would be more demand and who would not. The proof value is higher than 5% for the remaining questions, the null hypothesis is not rejected, so there are no statistically significant differences between those who think that if there was more offer and disclosure, there would be more demand and who does not think so. The agreement with “Attraction with places related to death (Rome Coliseum, Concentration camps, Christ Crucifixion, Medieval Executions),…” is higher for those who think that if there was more supply and disclosure, there would be no greater demand, being the differences observed statistically significant.

In the sample, agreement with “Visit areas of natural disasters: earthquakes, tsunamis,, …”, “Visit areas where disasters occurred with human origin: Ground Zero, Concentration camps,…” and “Association to past events, referring to the memory of such facts as murders” is higher for those who think that if there was more supply and disclosure, there would be no greater demand; the agreement with “Related to places of violent death and the valuation of human life.” is higher for

Table 7 Descriptive Statistics and Mann-Whitney Tests: Relationship between “In your opinion, “Dark Tourism” consists of:” and “Considering your group of friends, if there was more offer and promotion, would there also be more demand?”

N = 178		N	Average	Standard deviation	U Mann-Whitney	*p*
Visit areas of natural disasters: earthquakes, tsunamis,, …	Yes	155	3.29	1.419	13.0	0.096
	No	23	4.67	.577		
Visit areas where disasters occurred with human origin: Ground Zero, Concentration camps,…	Yes	155	3.71	.956	26.5	0.648
	No	23	4.00	1.000		
Association to past events, referring to the memory of such facts as murders	Yes	155	3.29	1.102	28.5	0.781
	No	23	3.67	1.155		
Attraction with places related to death (Rome Coliseum, Concentration camps, Christ Crucifixion, Medieval Executions),…	Yes	155	3.86	.793	7.5	* 0.026
	No	23	5.00	.000		
Related to places of violent death and the valuation of human life.	Yes	155	4.43	.746	21.5	0.330
	No	23	3.67	1.528		

* $p < 0.05$ *Source* Compiled by the authors

those who think that if there was more supply and disclosure, there would also be greater demand, however, the observed differences are not statistically significant.

Due to the statistically significant relationships, we can conclude that the objective "The tourism experience in Porto, within the ambit of Dark Tourism, is valued by the existing resources and its dynamization and dissemination.", for the following relationships:

– whoever agrees more that "Dark Tourism" consists of visiting areas of natural disasters and attraction for places related to death attaches greater importance to heavy environment as a characteristic in choosing a morbid destination;
– whoever agrees more that "Dark Tourism" consists of attraction for places related to death attaches less importance to bloody history as characteristic in choosing a morbid destination;
– whoever agrees more that the "Dark Tourism" consists of attraction for places related to death also agrees more that "It partially corresponds to the expectations and for that reason I am satisfied globally with the tourist experience";
– the agreement with "Attraction by places related to death (Rome coliseum, Concentration camps, Christ crucifixion, Medieval executions),…" is superior for those who think that if there was more offer and disclosure, there would be no greater demand.

5 Conclusion

Dark Tourism is defined as the visit to places where historical facts of morbid character happened which, in some way, involved suffering, and also places of worship to the dead, relating them to heavy environments, attracting the most curious and repulsing the most fragile, given that not all individuals are attracted by these peculiar characteristics.

Since the city of Porto doesn't have historical relevant events to the tourist trips, which alone justify the visit, framed in Dark Tourism, the objective would be to promote this type of tourism as a complement of the trip, stimulating, this way, the more conventional cultural tourism in the destination. This conclusion results from the direct approach with the tourists and their answers to the questionnaires, since those who did not know the subject showed interest in knowing more and visiting (after a brief explanation), and those who already knew had a special interest in visiting places associated with stories of deaths and suffering.

Due to the statistically significant relationships, we can conclude that the tourism experience in Porto, within the ambit of Dark Tourism, is valued by the existing resources and its dynamization and dissemination, for the following relations: whoever agrees more that "Dark Tourism" consists of visiting areas of natural disasters and attraction for places related to death attaches greater importance to heavy environment as a characteristic in choosing a morbid destination; whoever agrees more that "Dark Tourism" consists of attraction for places related to death attaches less importance to bloody history as characteristic in choosing a morbid fate; whoever agrees more that the "Dark Tourism" consists of attraction for places related to death also agrees more that "Partially corresponds to the expectations and for this reason I am satisfied with my tourism experience; the agreement with "Attraction by places related to death (Rome coliseum, Concentration camps, Christ crucifixion, Medieval executions),..." is superior for those who think that if there was more offer and disclosure, there would be no greater demand.

The initial objectives of this research were achieved by the review of existing literature and the consequent empirical study that added and complemented some existing gaps in the scope of the theme, specifically in the city of Porto: the collection and signaling of new potential tourism products was carried out for the city of Porto, once there was no study about Dark Tourism in the region.

The research emphasizes some of the sites associated with practicing the activity around the world, that is, the most characteristic sites associated with Dark Tourism, where tourists travel only for the purpose of visiting and knowing the associated bloody and morbid history. The main sites of Dark Tourism in the city of Porto are fundamentally cemeteries recognized by its architecture, associated with historical episodes where homicides occurred in a marked number, and exposed corpses in mausoleums. The findings of this study may aid destination management to develop tourism services by better understanding the benefits gained by visitors to an historical-cultural site.

For the development of future investigations related to Dark Tourism and of relevant interest for those who are interested in the subject, it is recommended, the collaboration with researchers/historians, with published studies on the city of Porto, in the development of a more in-depth investigation, related to important moments, such as invasions, demonstrations, struggles or revolutions, with deadly results for the city that should be remembered and valued for their inclusion in experiences of Dark Tourism. Regarding the recommended investigations, must be deepened and extended the questionnaire already applied, including those moments, heritage allusive, and respective evaluation of the behavioral attitude of tourists. The close collaboration of future investigations in the area with regional DMO's (such as Porto and North of Portugal—TPNP) and local DMO's (Porto Municipality) and the extension of the questionnaires application to other city points with high circulation of tourists such as downtownand the airport Francisco Sá Carneiro (Porto). Finally, should be supported the investigation of the underwater archeology connection to historical shipwrecks, namely associated with battles and the two world wars, dynamising complementary offers such as nautical tourism.

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Chapter 13
The Potential of Street Art. Obstacles to the Commercialization of Street Art and Proposed Solutions

Virginia Santamarina-Campos, María de-Miguel-Molina, Blanca de-Miguel-Molina and Marival Segarra-Oña

Abstract The recent commercialization of public art in Europe has placed Street art in one of the most powerful artistic sectors of the creative industry. The contracting of street artist for wall paintings by the public, private and academic sectors, has promoted the artist itself, and has generated a public acceptance of these creative resources. This institutionalization of the urban art movement in Europe has led to a museum recognition status of these spaces, which has resulted in the official declaration of outdoor museums such as Brussels, Portugal or Paris. Moreover, it can be seen as the development of public art proposals that give color to neighborhoods, providing Europe with uncountable, highly creative and innovative public spaces. As a result, the European Union street art industry produces annually over 180.000 new works, playing an active and vibrant role in urban environments by modifying the perception of its surroundings. The unique style, energy and innovation of street art has also a huge potential to be re-used and inspire other Cultural and Creative Industries, being in fact a vital economic driver for most CCIs. However, the numerous online collections of street art photographs are poorly managed and inefficiently catalogued, making content difficult to repurpose and reuse by potential users for their needs. Besides, street art photographs do not truly reflect the transformative nature of the wall paintings surrounding environment.

Keywords Street art · Cultural and creative industries · Creative spaces · Urban environments · Digital content

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V. Santamarina-Campos (✉)
Department of Conservation and Restoration of Cultural Heritage,
Universitat Politècnica de València, Valencia, Spain
e-mail: virsanca@upv.es

M. de-Miguel-Molina · B. de-Miguel-Molina · M. Segarra-Oña
Management Department, Universitat Politècnica de València, Valencia, Spain

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1 The Potential of Street Art

Street art is growing rapidly as a creative industry, being in constant evolution and producing over 180,000 works of street art per year. In fact, street artists produce creative spaces, rather than simply a painting or drawing, playing an active and vibrant role in urban environments by modifying and changing the perception of its surroundings. In this way, it has shaped the identities of many modern European cities such as Athens, Cologne, Lisbon, Łódź, London, Rome, Turin or Valencia, becoming an inseparable part of their cultures (Van Poll 2016). Consequently, street art also contributes significantly as an important economic driver for other industries, increasing local tourism (€400 Million per year), regenerating and developing local businesses (15–50% increase in revenues), in addition to revitalizing their neighborhoods Beautify Earth (2018), European Comission (2018), EUR-Lex (2018).

Such is the economic potential of street art that city councils are increasingly promoting the organization of festivals and various events and contests completely dedicated to street art (there are over 30 European festivals annually), incorporating music, food, family-friendly activities and charity fund-raising, among other activities.

The publishing and marketing sectors of the Cultural and Creative Industries have also notice the distinct and exciting visual style of street art, and the huge potential of this unique style. For this reason, its energy, innovation and design can be re-used and inspire advertising campaigns, fashion design, video games, performing/visual arts, locations for TV/films, etc. These creative activities are a significant sector of European growth, delivering 38.6% of EU GDP in 2012, while revenues from the digital markets for cultural and Cultural and Creative Industries within the EU have increased by €30 Billion between 2001 and 2011 EY (2014).

2 Obstacles to the Commercialization of Street Art

Currently, there is a vast amount of digital content available, with hundreds of websites, databases and mobile apps specialised in street art, hosting high quality digital images of street art. Those digital contents are of fundamental importance for the sector, providing access to works of street art geographically dispersed throughout Europe and of an ephemeral nature (street art can be repainted or modified at any moment). This content is part of European cultural heritage and it is potentially available to be re-used by other creative industries. However:

– These resources are not accessible. The main hindrance to wider use of digital street art is the difficulty in searching effectively for digital content. Street art it is not efficiently homogenised, inventoried or catalogued according to the needs of its potential users. Existing collections are important sources of digital street art, but they are inadequately maintained, their tagging is inconsistent and it follows no established system or guidelines, therefore tags are irrelevant to the search terms of potential users. Furthermore, tagging of available images is currently carried out manually, a process that requires large amounts of human resources.

– These resources do not adequately reflect the creative space. When capturing street art digitally, its connection with the surrounding environment must be maintained in order to preserve the created atmosphere and the transformative potential of street art, which is essential for locating creative spaces for sectors such as film, advertising or the video game industries. Photos or even videos capturing the surrounding environment are difficult to make, given the often-large dimensions of street art, the restrictive and irregular surroundings of the urban landscape and the requirement to obtain a complete view of the creative space. Scaffolding, which could be used as a method to obtain optimal elevated views, is expensive, time consuming and it has the risk of damaging the surroundings or even the artwork itself.
– Difficult to re-use or re-purpose digital content. Although there is a clear demand to exploit the potential of street art for other purposes such as advertising, branding and packaging, there is no dedicated cost-effective tool to create this type of content. There are digital tools available that enable the transfer of a specific style of an image to another, however these systems have many limitations: they are only based on the style of a single image; they do not allow the user to change image characteristics such as dimensions, perspective, lighting or colours; and they require large amounts of computational resources. Hence, there is no solution that permits the Cultural and Creative Industries tore-use existing content in a professional, cost-effective and controlled manner.

3 Challenges

3.1 Disperse Sources

We have identified more than 300 websites that possess collections of street art online with various methods of managing and searching their content (Santamarina-Campos et al. 2017). In order to find street art, end-users have to search through several of these collections individually. Examples of crowdsourced online archives of street art include Art Crimes (Art Crimes 2017), Fat Cap (Fat Cap 2018), or Street Art Utopia (Street Art Utopia 2018).

These online collections and the majority of search engines such as *Google,* process user search queries for images using descriptive metadata. Although these metadata based searches are trivial using today’s technology, limitations of this system become apparent when considering how descriptive metadata is produced.

Metadata can be produced for street art images in one of the following ways: manual tagging, automatic generation by digital cameras, smartphones, tablets etc., and automatic generation through image analysis software.

Efficient search performance requires media to have high quality descriptive tags and generally, the lack of detail in existing tags is a factor limiting the efficiency and usefulness of these search engines.

Tags of varying quality can be created through manual tagging by artists and collectors. Limitations are evident in manual tagging when noting that each image would need to be individually tagged, and that some synonyms can be easily missed when simply manually entering metadata. While creating metadata manually for small numbers of images is feasible, it is impractical and unsustainable to do so for large databases or collections of tens or hundreds of thousands (the size of some of the largest street art collections).

However, the metadata created by a digital equipment producing the image is useful for managing and organising images, for instance giving information about when, where and how an image was taken. But, this is of no use when searching for images based on their characteristics.

The extraction of image characteristics in large image collections can be carried out efficiently using machine learning techniques. For example, methods such as decision trees were used in the early implementations of advanced deep learning algorithms, which produced systems of hard-coded rules, similar to a flow-chart, to make decisions. They have the disadvantage that they generally only produce one final output value. But more sophisticated systems using statistical models are commonly researched now, which are able to assign probabilities and weights to inputs to the system in order to produce a variety of outputs with a range of likelihoods. Even these systems only typically extract low level image characteristics such as shapes, objects, colours etc. However, in order to allow end users to locate street art images, more detailed aspects such as movement, emotions and themes are required.

In recent decades, it has increased research into intelligent analysis techniques to automatically extract image characteristics for use as metadata and effectively describe images. The generation of sentences from images, and vice versa, has been investigated using statistical models to define a phase-space based on the "meaning" of sentences or images (Farhadi 2010). Neural networks are also widely used in producing automated image descriptions based on semantic analysis of image contents, and 'training' the system so that it learns from images analysed in the past (Karpathy and Fei-Fei 2015).

Neural networks are so-called because, conceptually speaking, they imitate the way in which the animal brain works, although at a much simpler level. They consist of networks of nodes, each of which takes inputs and associated weights from an external source or other nodes, and computes an output based on a non-linear function. Arranged in layers through which data passes as inputs and outputs, they are capable of using the patterns present in training data to provide a probabilistic output. A further advancement, convolutional neural networks, have connection patterns between their nodes that are similar to the structure of the visual cortex in animals. They are a type of neural network in which input data is convolved with a sliding filter through a series of matrix operations, and have been shown to be effective in image recognition and classification. Producing simple image descriptions with these techniques does, indeed, provide some additional information for potential end users. However, the current status of this technology is adequate only for basic object, colour and action recognition, therefore meaning is not sophisticated enough to provide comprehensive descriptive terms, including synonyms and similar words, that could be used to tag and search complex street art images efficiently. Intelligent video analysis techniques have also been developed but focus them mainly on human identification and behaviour recognition for security, surveillance and crime prevention purposes, such as P-REACT (2018), an EU funded project.

3.2 No Street Art Specific Ontology

The tag quality will also be affected by the ontology on which tagging is based. Many classification systems exist, for example:

- The Art and Architecture Thesaurus (AAT) (Getty Research Institute 2018a), The Getty Thesaurus of Geographic Names (TGN) (Getty Research Institute 2018b), The Cultural Objects Name Authority (CONA) (Getty Research Institute 2018c), and The Union List of Artist Names (ULAN) (Getty Research Institute 2018d), all of which have been created by Getty Research Institute.
- The collaborative American Institute for Conservation of Historic and Artistic Works' Lexicon Project (American Institute for Conservation of Historicand Artistic Works 2018).
- The Conservation and Art Materials Encyclopaedia Online (CAMEO 2018). This is an electronic database that compiles, defines, and disseminates technical information on the distinct collections of terms, materials, and techniques used in the fields of art conservation and historic preservation.

Additionally, for the classification of cultural heritage, several specific systems exist:

- The CIDOC Documentation Standards Working Group of the International Council of Museums (ICOM) (CIDOC 2018) has developed formal structures for describing the implicit and explicit concepts and relationships used in cultural heritage documentation.
- Categories for the Description of Works of Art (CDWA) (Getty Research Institute 2018e), developed by the Getty Institute, is mapped to the CONA and CIDOC Conceptual Reference Model (CRM). The CDWA is a set of guidelines for the description of art and provides a framework to which existing art

information systems may be mapped, upon which new systems may be developed, or to which data may be linked in an open environment.
– Cataloguing Cultural Objects (CCO) (CCO Commons 2018) is designed for professionals and provides rules for descriptive cataloguing of art, architecture, cultural objects, and their images.

While these classification criteria, structures, taxonomies and ontologies all perform satisfactorily for their design purposes, no such classification system exists for street art and its potential use by the creative industries.

For example, ImageNet is an international database of standardised images and associated information, specifically created for use in image analysis and object recognition software. This collection is often used in research into objective characteristics of images, and can be used to train software in order to identify objects in images. However, this and other similar standardised image sets provide standard images that have no specific connection to street art. A dataset to train and test semantic urban scene understanding has been developed (Cordts et al. 2016), but it is directed towards the recognition of common objects in urban landscapes such as trees, people, buildings, vehicles, animals etc., and therefore does not provide any street art specific information. Indeed, no standardised street art specific image set is available in order to train machine learning algorithms on the particular concepts of street art.

4 Impact of Street Art

The considerable influence of street art on modern society and other creative industries has created a huge demand for re-using and re-purposing digital and non-digital works of street art.

4.1 Potential for Re-using Street Art Environments by Other Creative Industries

The creative spaces in which street art is created are often sought after for use in other creative industries. Television and movie sets regularly make use of street art spaces and environments for depicting urban scenes, including Stephen Spielberg's Ready Player One, to be released in 2018, which was shot amongst the large amounts of street art in inner city Birmingham, UK (Alamy 2018), (Den of Geek 2018), (Pop Culture Now 2016).

For instance, automotive companies often use street art in their advertising campaigns to convey a sense of energy and dynamism to their cars. Suzuki

(Suzuki 2014), Hyundai (The News Wheel 2015), Honda (Honda 2013), Nissan (Nissan 2011) and many others have used street art environments to film advertisements for their cars.

Street art environments also provides rich stages for video production in the music industry, as they are able to provide a variety of backgrounds for a wide range of musical tastes. Some examples include the music video of the title track from the Spanish version of Disney's Beauty and the Beast (Superweoz 2017), as well as more stand-alone music videos (Lokallegend 2014), (Ultra Music 2017). Similarly, the flexible and open nature of street art environments lend themselves well to fashion shoots and photo shoots (Hunter 2010). In this sense, GSA has completed projects for recording artists like Stromae, Raury and Drake. Many major acts have commissioned murals, from the likes of Maroon 5 to Adele.

In addition to the use of street art environments, value is also often added to private spaces by incorporating street art in the decoration process, for example in restaurants and hotels (WideWalls 2011a), (WideWalls 2011b). Most recently, the world-renowned British street artist Banksy opened the Walled Off Hotel in Palestine, West Bank, which contains interior decoration inspired by street art (Sanchez 2017).

4.2 Potential for Generation of New Digital Content Based on Street Art to Be Re-Purposed

There are many publications and vendors that provide street art images as they are, i.e. without modification for a specific use, such as the Black Rat Projects that represents artists of the likes of Shepard Fairy and Banksy (Street and More 2018), (WideWalls 2011c).

Advancing on using street art images as they are, street art also serves to inspire products in many sectors. A great deal of advertising is carried out in relation to street art, with big businesses keen to exploit its huge potential to attract attention to their products and services. Brands that have used street art to carry out advertising campaigns include Nike (WideWalls 2011d), Adidas (Boom 2008), McDonald's (Ads of the World 2018), Pfizer (Pfizer 2018), or Lipton (Hunt 2018). Food and drink businesses have exploited street art successfully in their advertising and promotional campaigns, such as Cruzcampo advertising their beers (Cruzcampo 2016) and Coca-Cola have commissioned street artists to help in the design of advertising campaigns and packaging related to the Rio Olympics in 2014 (Coca-Cola Company 2018). Other businesses have also taken inspiration from street art for product packaging, such as Perrier (TheDieline 2015), (TrendHunter 2018) and luxury goods manufacturers such as Moet & Chandon and Kaspia Caviar (PSFK 2012). Television/movie set design often involves the creation of street art content relevant for the project in question (The Loop 2018) and video games employ street art imagery in their design. Games such as Dying Light have received praise for the realism added to its gameplay through the use of street art (Hamilton 2015).

Fashion names such as Louis Vuitton (WideWalls 2011e), Obey (WideWalls 2011e) and Alexander McQueen (WideWalls 2011e) have incorporated street art into their clothing designs with great success. An early example of collaboration between street art and fashion was between Louis Vuitton, Marc Jacobs and Stephen Sprouse, leading to a $300 Million profit in 2001. Finally, street art has also been used for political and awareness campaigns, as done by Amnesty International (PSFK 2010). For example, Global Street Art (GSA) has completed commercial street art projects for Adidas, Fox Film, Wacom, Halifax Bank, Starbucks, Creative Content UK (whose members include Sky, Amazon, BT Sport, etc.), Google, Doc Martens, Monster Recruitment, New Look and numerous property developers.

All of these extensive uses of street art and its locations are carried out by various sectors of the cultural and creative industries. With an annual revenue of €535.9 Billion and representing Europe's third largest employing sector (over 7 Million people employed), these industries contribute considerably to the GDP of the EU (4.2%) and therefore have a significant role to play in the success of publicising and commercialising street art (EY 2014). However, the existing barriers for searching and re-purposing street art content mean that the economic benefits from these other creative industries is lost.

Street artists are well aware of the economic benefits of the internet and of having an online presence, including on popular social media sites like Facebook, Instagram, etc. to showcase their work. As a result, there are more than 300 online collections of digital street art identified to date, with hundreds of thousands of photographs. These collections are important sources of digital street art, but have interfaces and functionality that do little to stimulate its re-use and re-purpose by end users, and lack efficient organisational structures for cataloguing content.

However, the additional internet traffic and visibility obtained through small scale tools, such as personal websites, do not maximise the full potential that street art possesses to impact and influence the work of many other sectors, especially other creative industries.

4.3 Valorisation of Environments and Increase Economic Prosperity of a Region Through Street Art

Street art has the potential to change the perception of its surrounding environment, and additionally the economic impact of street art on local communities has been notable. Street art can become an economic driver, resulting in increased public engagement, regenerating and developing local business through encouraging local creative industries and revitalising declining neighbourhoods (Chang 2014). There are many examples of this, e.g. in Miami, USA, street artists were invited to create work in a run-down area of the town attracted up to 15,000 people per day, adding to the associated economic benefits to businesses in the newly redeveloped area, and local property rent prices increased from $65/m2 to $377/m2 (Wynwood Walls 2018), (Urban Land Magazine 2015).

In a further example, other areas scheduled for redevelopment were temporarily transformed with street art, resulting in increased pedestrian traffic and business. Incorporating areas of street art in city centres in Santa Monica, USA, led to increases in pedestrian footfall of up to 50%, a local business experiencing $1,200 daily increases in spending, and a 5.1% increase in annual spending (Beautify Earth 2018). Further evidence for the positive impact of street art on local economies comes from industrial cities such as Łódź, that have experienced upturns as a result of increased activity related to street art and creative and cultural industries. Additionally, a non-tangible benefit stems from the inclusive nature of street art because it is accessibility to everyone regardless of socio-economic status, with no restrictions such as opening times. Street art also adds value to any environment, which will attract communities and in turn, add value to the local area.

4.4 Providing a Boost to Tourism and Tourism Related Businesses

Street art also acts as an important economic driver in other industries such as tourism. Europe is the most visited continent amongst tourists, with travel and tourism contributing $779.7 Billion to EU GDP in 2015 (World Travel and Tourism Council 2015). Assuming that street art makes up 1% of the visual arts industry in Europe in terms of turnover, the cultural tourism generated by the street art industry can be estimated at approximately €400 Million annually (European Commission 2018), (EUR-Lex 2018). Street art has contributed to tourism in two main ways: the attraction of the street art itself and the surrounding related events. Another burgeoning aspect of tourism related to street art is that of street art tours. In particular, in cities renowned for their street art culture such as London, Lisbon, Barcelona etc., street art tours are a significant attraction for tourists, with also associated benefits for their local economy.

The Urban Forms Gallery (Urban Forms Foundation 2018), with funding partly contributed by the local city council, created large works of street art in the city of Łódź, Poland. The aim was to create and project a new image for the city, thereby encouraging tourism to the city. Therefore, some areas of the city that previously were considered unattractive could obtained more modern and developed outlooks. In addition to positive social impacts and developments within these communities, the city became a tourist attraction for visitors from all over the world and the local economy obtained benefits from extra development and investment in the area. In

Penang, Malaysia, a street artist started popularising street art in 2012, and since then throughout the inner-city area, street art has flourished, attracting tourists from all over the globe.

As an example of the potential of street art events, Banksy's five-week long subversive Dismaland exhibition near Bristol, UK, resulted in an estimated £20 Million increase in revenue for the local town of Weston-super-Mare, with 4500 tickets sold per day (Harvey 2015), (Gibson 2015). The secretive artist recently opened a hotel in Bethlehem and after it was noted that at some points, the Banksy's work has drawn more tourists to the region than for its religious significance (Kirk 2017).

5 Conclusions

A combination of the above factors makes the experience of searching online street art and its re-use, a frustrating and inefficient practise for users, resulting in a decrease in its re-use and the loss of other derived economic benefits of influencing some creative industries. To this end, it is necessary to:

- Facilitate the management of digital street art images by tagging them automatically, following a dedicated street art ontology, with image characteristics and concepts used by potential end-users.
- Facilitate the production of digital content that preserves the relation between street art and its environment, through the production of immersive 360º videos of street art locations, for example with the use of RPAS (drones).
- Facilitate the search and re-use of digital street art content by other creative industries, whilst preserving the rights of the artist and allowing them to profit their work.

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Chapter 14
Agrotourism: A Lever for Rural Development Based on the Cultural Reserve of Greece

Maria Karagianni, Stavroula Georgakopoulou and Vasiliki Delitheou

Abstract Agrotourism is a tangible reality of at least fifty (50) years of age in the developed countries of Europe and a new experience of almost twenty-five (25) years for the Greek economy and society. This is a "new reality" that is different in the Member Countries of the European Union than in Greece. The first ones are based on the entertainment of the tired city man, while Greece, with agrotourism, aims to "stimulate rural income", highlighting its cultural stock. The two afore mentioned different starting points are those that can predict the future of agrotourism in the country and unleash positive developmental or non-developmental progress. The Greek experience and reality has so far proved that agrotourism is moving within a framework that defines it: the protection of the natural environment, the respect for folk architecture and folk tradition, the revival of old rituals, the sincere human contact, and others which the people of Greek-European cities have to benefit. "Those who want to enjoy peace, tranquility, simplicity and nature will find themselves in their element," say those who have spent the days of their holidays on a "farm", and this is what some of the agro-tourism organizers in our country declare. Although this approach does not "highlight" the whole range and content of agrotourism, this view has few fans at the moment and seems to constantly gaining new friends. Initiatives and actions to promote agrotourism in Greece have been manifested in many regions. However, most initiatives and actions have been promoted in the past for the consolidation and expansion of agrotourism in the country and, of course, due to European

M. Karagianni
Sustainable Development, Harokopio University of Athens, Greece & Culture, Policy and Management, City University of London, London, UK

S. Georgakopoulou (✉)
Applied Economics and Regional Development, Panteion University of Athens, Athens, Greece
e-mail: roulageo2009@hotmail.com

V. Delitheou
Panteion University of Social and Political Sciences, Athens, Greece

V. Katsoni and M. Segarra-Oña (eds.), *Smart Tourism as a Driver for Culture and Sustainability*, Springer Proceedings in Business and Economics,
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structural programs and to the opportunities offered by Leader I, II and Leader +, although the applications so far show that the "agrotourism idea" in Greece is still going through the first, we would say—steps.

Keywords Agrotourism · Rural development · Culture

JEL Classification Z32 Tourism and Development

1 Introduction

According to the World Tourism Organization (UNWTO), tourism includes the activities of people who travel and reside in destinations and areas other than those that are their usual environment (e.g. their place of permanent residence) and for a period of time which does not exceed one year, for the purpose of recreation, satisfaction of their professional needs, etc. This definition helps to identify tourist activity both domestically and internationally. The word "tourism" refers to all the activities of travelers and includes tourists (overnight guests) and excursionists (day visitors) (Delitheou and Georgakopoulou 2017: 174).

Tourism is divided into two main categories: mass tourism and alternative tourism. Mass tourism refers to the activity of many different people, while alternative tourism goes beyond these standards (Available: https://agrotourism.wordpress.com/'Αλλες-μορφές-εναλλακτικού-τουρισμού/, 23/05/2018), and defined as forms of tourism that are compatible with the environmental and social values of the region and which allow both the host society and visitors to enjoy a positive and valuable interaction and shared experiences at all levels (Delitheou et al. 2016: 1).

Agrotourism is considered as a "form of tourism" and it is: "the parallel development of activities aiming at the economic upgrading of rural areas, with the support of local agricultural production, mild local agricultural production, marketing, mild and small-scale supply of tourist services and the promotion of the cultural and natural wealth of each region" (Fraidaki and Karagiannis 2012).

Agrotourism has already been established as a term of economic science and it is often used by those working with the issues of rural economics or the tourism economy. For lexicographers: "agrotourism is the organized tourist activity, whereby tourists are guaranteed free accommodation on a farm in return for their participation in rural activities". It seems that there is an ambiguity about the Greek reality about what agrotourism means, which means there is a lot of confusion in using this term, so clarification and a clear approach is needed to better understand the content of this volume (Exarchos and Karagiannis 2004).

2 Literature Review

Agrotourism is a type of holiday that has been dictated by the need for the economic survival of some small landowners—farmers who have decided to follow traditional farming methods—avoiding the use of pesticides and chemicals—despite the fact that the products of such crops acquire a constant increasing demand —but these farms are still not profitable—and provide hospitality to people who want to live near nature, who want to see closely the traditional forms of farming and which—many times—want to participate actively in them, and by this way landowners—farmers receive an extra income (Apostolopoulos and Diagkou 1997).

Agrotourism refers to specific areas, and their activities are directly linked to local traditions and locations (Bratsa 2009: 10). Those people who choose to do this kind of holiday are going to live in landscapes of special natural beauty and can indulge in a range of activities like hiking, cycling, horse riding, swimming etc. In addition, they have the opportunity to experience local cooking, to consume local traditional healthy products, but also to get in touch with the customs of rural populations, which have been forgotten by the people of the city (Logothetis 1988). Finally, tourists can participate in other activities, such as observing the ecosystem (birds, fauna, flora, wetland visits), cultural tours (visits to monasteries, churches, folklore museums, traditional settlements, archaeological sites) various lessons (different courses, Greek dances, gastronomy—Greek cuisine, wine tasting, wineries, local products etc.) (Ieronimaki 2013).

Agrotourists choose their accommodation based on:—farming methods applied to farms; - the natural beauty of the surrounding area;—nature protection;—providing good living conditions;—providing local healthy eating dishes.

The authentic nature of the farms can be maintained when no more than fifteen (15) people are accommodated in each of them, when family members providing “hospitality” come in direct contact with the “visitors”—tourists, when the agrotourists know the region and the traditions of people and tour around the farms in the neighboring countryside, and when the guests can—if they wish to—participate actively in the work of the farm.

Agrotourism brings also a number of positive economic, social, cultural and environmental impacts, related to income, employment, the use of available housing, the activation of rural areas, the protection of nature, as well as rest, recreation and education of urban and rural populations (Tsapaki 2011: 26) and, in addition to the positive effects, can also lead to negative ones (e.g. the creation of part-time employment, a possible increase in land market, the creation of a sense of invasion of tourists in the region, the introduction of new cultures and ideas from other countries, etc.) (Kostakopoulos Kostapoulos 2013: 29).

3 Agrotourism: Development Lever

Development is a process that aims to increase GDP and through it, improvements in housing, health, education, employment and lifestyles, environmental rescue, etc. are achieved. Sustainable development is defined as development that meets the needs of the present without diminishing the capacity of future generations of people to satisfy their own (Delitheou 2008: 34).

Local development is the process of economic development and structural change in a territorial unit that aims to improve the standard of living of local citizens. This process has an economic, social, cultural and political-administrative dimension. The local development strategy treats each spatial unity in a different way, according to the level of development of the local economy, the structure and function of the productive system, the labor market and the characteristics that define the local culture (Georgakopoulou 2018: 39).

Agrotourism also seeks to promote the cultural and architectural heritage, to preserve the uniqueness of each region and to achieve the inhabitants' stay in these areas (Grigori 2015; Dragasaki 2013: 21).

In this way, agrotourism contributes greatly to local development and is directly and harmoniously linked with other economic activities of each region (Tomaras and Lagos 2005: 7): Creating hostels and staffing them means new jobs, and the development of agrotourism means additional profits in rural areas and population retention—especially of young people—in the countryside. Agrotourism also means increasing "social life" in remote villages, something that many residents of small and "isolated" settlements are in great need of (Papakonstantinidis 1992).

It has been observed that a significant part of the profits generated by agrotourism is channeled into the main occupation of the rural population that is agriculture and that a significant proportion of rural income in some regions of the country is created by the active participation of women in the consolidation of agrotourism, which means that agrotourism also contributes to movements, actions and initiatives of inactive—to now—social groups.

4 Agrotourism: Supplementary Facilities

Staying in rural tourism can vary according to the wishes and needs of the visitor (Darakis 2009: 66).

The problem of accommodation is not the only one to be solved in order to achieve an integrated return of agrotourism, because in the general tourist policy for overall quality upgrading and diversification of the tourist product, agrotourism development programs should include various facilities and superstructures, such as:

- Restaurants and pastime centers
- Small cultural facilities

- small facilities for special tourist infrastructure (exhibition centers, sports facilities, etc.)
- Laboratories for the processing of agricultural products and sales outlets, etc.
- Information and booking office (Vasilaki 2006: 15).

In the aforementioned cases, the accommodation of all these “uses” should be in traditional buildings in priority, especially those related to the specific tourist infrastructure, such as congress centers for example, while the minimum requirements should be met in order to the – subsided- projects serve the intended purpose. We clarify that the aforementioned “facilities and superstructures”, as well as the accommodations, are being built according to the provisions of Article 2 of Law 2160/1993 and they are under the control of the Hellenic Tourism Organisation (E.O.T.) (Gidarakou n.d.: 7).

It is of major importance, the organizational agrotouristic infrastructure (planning, marketing-promotion, technical assistance, organizing the operation of the units for market access, joint ventures in the fields of information, reservations, supplies, etc.), as well as training—preparing the farmers for the new role they are asked to play. Those who are well aware of developments in the Greek agricultural sector and in the Greek tourism sector believe that rural development through agrotourism is not ensured, and yet they all advocate financing of agro-tourism facilities, provided they have to be integrated into the framework of a national tourism policy, the terms and rules of which will be regulated by a fixed and flexible legislation.

5 Agrotourism and “Agricultural Sector”

Any form of cooperation between agricultural policy and tourism policy can generate significant benefits for both economic “activities”, and this requires close cooperation between tourism businesses and rural businesses on the basis of a constructive and creative spirit that rejects narrow-minded corporate behaviors which usually lead to failures. The essence and prerequisite for such cooperation is: Tourism to complete the Rural Sector and not be a substitute for it. The agricultural sector has been—and still is—the main sector of the Greek economy and the tourism sector has been—and still is—an important sector—a carrier of necessary financial resources of our National Economy. This link will have as its main objective the reduction of the seasonality of Greek tourism, the increase of the average amount of tourist expenditure and the acquisition of quality tourism, which will highlight the special and authentic face of our country (Spithakis 2017: 54).

Close cooperation between the Tourism and the Rural Sector usually begins with the selective recovery of farm buildings and landscapes in order to give them the quality that will transform them into “elements” on which agrotourism activities will develop.

The completion of the tourism-rural relationship requires the protection of the natural environment and thus rural production problems arise, which are associated with the limitation of zootechnical activities (reduction of sheep and goat farming) and crops, limitations are being put, imposed for the protection of the natural environment.

Extensive and intensive farming and nomadic livestock are considered to be the ones that primarily destroy the environment and they are therefore considered incompatible with the ecological and environmental objectives of agrotourism, especially in protected areas. In these circumstances, agrotourism is a catalytic factor: it completes the activities of the agricultural sector and offsets the reduction that may occur in producers' incomes from their agricultural productive activity, by replacing (those "lost" incomes) with agrotourism or from the new agricultural production activities.

Agrotourism is a "small-scale phenomenon" spread over relatively large areas and helps to minimize past environmental damage, mainly by over-population concentration per unit area. It thus appears that agrotourism is also important in protecting the environment and in upgrading natural resources and soils (Exachos and Karagiannis 2004).

Traditional settlements are an important cultural and architectural heritage and they are often underestimated as to the feasibility of their real economic value. We often protest for their preservation, which means that we do not show proper respect for the typology of pre-existing architecture. And when some "residential restrictions" are introduced, for the realization of which we encounter an obstacle … traditional settlements (!), we should consider that this "obstacle" is unreal and exaggerated.

Agrotourism changes the behavior of farmers, rural people who are actively interested in protecting the natural environment and preserving the integrity of traditional settlements, which means increasing the number of agrotourists and—by extension—increasing the income generated. Of course, in order to reach tourists in rural villages, farmers must also "work" in the field of advertising and ensure a "simple but live reception" with a package of minimal proposals, which will not be lagging at elementary facilities, (at least) in managing excursions, on routes, in upgrading the natural environment and in securing the necessary social and commercial services (Askeli 2005).

With agrotourism, we have the presence of a form of "indigenous development" of tourism, linked to the local entrepreneurial initiative, and as such is open to developments and interdependent activities directly relevant to the socio-economic progress of the concerned zones-places.

Tourism Regulation 92/421/EEC (17-7-1992), although old, points out that "Tourism in the Community should respect local populations as well as the natural and cultural environment in order to promote the quality of supply". The same Regulation places particular emphasis on the development of agrotourism, because "the Community's action in this field is to develop tourism activities in the countryside, in particular agrotourism, small family hotels or the activities of clubs, municipalities or local institutions".

6 Trends and Infrastructure of Agrotourism

Agrotourism in the first place can be developed in settlements built with traditional materials and can thus give the image of a traditional village. As a result of this perception, which has grown in recent years in central European countries and in some African countries, it is the fact that whole "traditional villages" are built or substantial interventions and interventions are made in abandoned settlements to emerge and resemble "Traditional settlements".

At the same time, these settlements create important infrastructure (shops) and they are designed to give the image of a traditional village (building with local materials, careful decoration, selling local products, etc.). Great importance is given to the small scale of buildings and it is intended that all the buildings are integrated into the natural environment. Each building must have its own autonomy (bedrooms, kitchen, bathroom, other functional spaces, etc.) and some buildings are created to give a particular climate to the settlement, a fairground, a small amphitheater for cultural events and more.

Agrotourism can be developed in traditional settlements and farms, which ensure agrotourists stay and food in a separate house.

This form of agrotourism has been steadily developing—over the last few years —because of the advantages it presents to both farmers and tourists: The first (farmers) maintain their private space and—by creating tourist infrastructure in their habitats—try to increase the potential for better marketing and for better prices, and tourists have autonomy in sleeping and eating, which is extremely tempting for families with young children.

Such agrotourist units often have children's facilities (e.g. playgrounds, etc.), but also facilities for sports and nature activities, which requires increased investment costs and extensive rural exploitation. Agrotourist units providing such services provide multiple advantages to the farmer—"agro-tourism entrepreneur".

Tourism in the countryside includes all forms of tourism activity in rural areas, and this activity exactly is agrotourism, which main characteristic is the attempt to connect agriculture and tourism in different organizational and operational ways with the ultimate aim of mutual benefit and especially the benefit to agriculture and the maintenance of the economically active population in the countryside.

Outdoor tourism means that the tourist can stay in an outdoor camping or in an agrotourist unit or in holiday hotels and this tourist activity may come from the private sector (e.g. hotels, rooms to let, etc.) or may be the result of local government initiatives (e.g. municipal or community pansions, community camps, etc.) or may be an agro-tourism cooperative activity (such as, for example, female agrotourism cooperatives in several settlements of the country that have "rooms to let", etc.) or an activity from an institution which has a legal form and substance.

The incentive to set up these "tourist units" is to be able to respond to the tourist's need for return to nature (ecotourism, mountaineering, winter tourism, etc.) or to meet the tourist's need for holiday and pastime activities that take place in the countryside (coastal hotel units, "camps", etc.), without being connected, however, in any way with the local economic, social and environmental "structure".

7 Strategy and Tactics for Agrotourism

Determining the agro-tourism mission, establishing the objectives and constant preparedness to cope with each change is an integral part of planning and, consequently, drawing up strategic plans and tactics for agrotourism.

The strategy for a special form of tourism—such as agrotourism in its broadest sense—is a dynamic plan of action to achieve its mission and operational purposes. The strategy is a catalyst and a driver of actions and it definitely contains micro tactics to deal with everyday or short-term cases—problems.

The micro tactics use the daily forces of the company to achieve the overall strategy. In the event of contradictory arguments, it is true that systematic programming and marketing strategy—based on a renewal readiness to deal with changes and competition—make a successful business stand out from a modest one (Iliopoulou and Kopanou 2014: 13).

In Greece, since the 1960s there has been an unplanned and empirical development of forms of agrotourism, mainly in coastal areas that later became centers of organized mass tourism. This development was based on the effort of indigenous locals to offer their homes hospitality and often to offer their tourists and local products. The lack of coherent national and local programs and the rapid expansion of organized mass holiday tourism in these areas has left unfinished any attempts that have gradually turned into rented rooms.

Thus, there has been a significant lag in relation to other developed European countries, which for at least fifty years have developed agrotourism alongside with social tourism, using them essentially as the main tools of their regional development.

In Greece there have been attempts to elaborate such development programs in the 1975–1990 period, but without any tangible results, due mainly to the following reasons:—incomplete legislation,— lack of know-how,—wrong spatial planning, and—unclear funding criteria, which make it imperative to have the following in the short term:

- the drafting of two or three pilot programs for mountainous and landlocked areas of the country, which will help to extract rational and reliable conclusions
- Creation of know-how on issues related to economic and technical infrastructure, forms of employment, marketing and promotion, taxation
- Emphasis on the spatial dimension of rural tourism development, taking into account the existing types of tourism development (Exarchos 2003 and Scientific Meeting, 2013).

Agrotourism and outdoor tourism can only be developed in the country's mountainous or semi-mountainous areas, not in areas adjacent to mass tourism. Indicatively, such sites for agrotourism development are proposed in areas of the central and mountainous Peloponnese, mountainous Roumeli, mountainous Thessaly, mountainous Epirus, mountainous Macedonia, mountain Thrace and mountain Evia. A decisive role in this approach has been the fact that it has been proved in practice that the development of agrotourism near areas of mass tourism is not successful, as the developmental patterns of the touristly saturated areas are usually copied and it has the consequence agrotourist attempts to often end up in "rooms to rent".

Through the delimitation of the concept of agrotourism can be seen the basic elements which are also the main axes of any agrotourism development program:

- The complementarity of the income of the rural family. It is a fundamental element and automatically introduces the developmental and social dimension into the concept of "agrotourism". Agro-tourism is not an activity that will substitute for employment in the agricultural sector, but—on the contrary—it is the one that will support and strengthen the local population in its main occupation, which is and remains agriculture.
- Agrotourism, as a supplementary resource in the rural family budget, means greater disposable income, improved living conditions, widening access to employment and reducing "abandonment" incentives; it means—ultimately—keeping the local population in outbreaks.

Given these two main axes, it goes without saying that an agrotouristic development program can benefit simultaneously multiple rural families in many ways, since it will help generate additional revenue for them. However, the small family or partnership business unit is not in a position to complete the effort to set up a coordinating body with competences to create an agrotourism policy, or to set standards or to impose controls on the implementation of these programs. As a result it is noticed an inherent inability to use it agrotourism as the sole lever for the implementation of a regional development policy of the "unproductive" and abandoned mountainous and semi—mountainous regions of the country (Klitsou 2014: 15).

Until today it is not known to what extend Agrotourism development programs have achieved the desired or anticipated results, since the lack of control of the course of lending and subsidies and of the application of the specifications set, "allows" part of the loans granted to result in … lending farmers to build their homes or build other farm buildings (e.g. warehouses, pumping stations, etc.).

We believe that to date there have been no significant efforts by local development agencies or municipalities to jointly participate in private enterprise programs for the development of agrotourism. On the contrary, in many cases lending to people who did not have any organizational and operational support from an "operator" (cooperatives, landlords, etc.) proved to be inefficient, mainly because there was a lack of know-how.

The problems that can be highlighted are mainly due to the special forms of tourism and to the fact that farmers must emphasize to alternative forms of tourism: agrotourism, cultural tourism, winter tourism, etc.

8 Forms of Agrotourism and Their Stimulation

The predominant forms of agro-tourism at international level are farm holidays and holidays in rural accommodation (farmhouses) located in the rural settlement. Greece with its large residential dispersion, with its Polynesian formation, with its decentralized monumental topography, with its alternating topological morphological contradictions and with its climatic differentials, concentrates on the conditions for the development of a wide scale of forms of agrotourism (Arvanitaki 2010: 18).

Various forms of tourism are directly or indirectly related to agrotourism, which essentially defines the structure of the particular tourist units or businesses and in this sense agrotourism is: tourism on a farm (cohabitation with farmers), tourism in autonomous buildings on farms (cottages or bungalows), outdoor tourism (motorhomes, caravans, tents, etc.), tourism in rented rooms or in traditional settlement buildings (with or without cohabitation with farmers), tourism in protected areas (national parks, ecological protection areas) etc.

These necessary specializations have led to the creation of an extensive agrotourist education infrastructure in countries that have a tradition of agrotourism and which—training—aims to get farmers to know the subject of agrotourism, to provide farmers with the necessary knowledge and management of these businesses, by channeling to farmers—through lessons—all information relating to the organization of agrotourism business marketing. Initially this training was provided by the states, which at the same time lend and encouraged the development of agrotourist businesses, but then part of this training was undertaken by associations of owners and organizations promoting this form of tourism (Igoumenakis 1999).

The development of agrotourism its encouragement and strengthening is made through EC/EU funding, according to the relevant Regulations and the National Legislation (e.g. Regulation 797/1985), which clearly defines the following:

- Agrotourism refers to the creation of tourist accommodation of the type rented room or apartment or small guesthouse in a rural area. The main rationale for supporting the rural family with a complementary resource rather than substitution of farming, are prerequisites for exploiting the potential of agrotourism. The supplementary activities focus on securing nutrition and entertainment for visitors and on the construction and marketing of the folk art and products of local craft and cottage industry".
- The study of agrotourism development needs to identify the main productive activities of the area and the possibilities of integrating agrotourism into the general development of the area, the accessibility of the area to the large urban

centers and in particular to the settlements where they will develop and exist: sea, shores, sun, thermal springs, caves, antiquities, traditional settlements, interesting landscapes, historical—cultural and religious treasures and which are an invaluable national capital, so their preservation, protection and development are the main goals of tourism policy."

Undoubtedly the nature protection and conservation programs are costly due to the value and the wide variety of the natural environment. However, the implementation of such programs has educational, economic and social benefits on a global scale, while at the national level they secure new employment—jobs. Citizens' willingness to cooperate—for such environmental or ecological projects—depends on their proper information on these issues and possible "complications".

However, in order to consider an attempt to establish, organize and develop agrotourism, it must be:

- Established a co-ordinating body for all organizations that have agro-tourism programs that will have key responsibilities in programming, funding, developing and controlling the proper implementation of all these programs, providing also financial support, as well as appropriate infrastructure and appropriate marketing for the promotion of agrotourist areas and agrotourist units.
- Two or three pilot programs for mountainous and semi-mountainous areas in the country should be elaborated, which will in fact provide the conclusions that can lead to the right choice of types and forms of agrotourism to be developed in the country.

9 Organization of the Countryside

The above analysis reveals that it is necessary to formulate and implement a national regional policy, which main concern is to support life in the countryside and, above all, to support youth, in order to remain in dignified conditions in the ancestral home, respecting and reproducing eternal cultural and humanitarian values and enjoying the social and other services of the people of the cities.

Such a choice presupposes redistribution of national income so as to stop the phenomenon the income of rural people being a small proportion of the income of petty bourgeoisie and capitalist bourgeoisie. Redistribution can only be achieved by expanding the production base to sectors of producing goods to meet domestic demand and contributing to a gradual decline in imports as well as to advanced modern technology (Morres 2009).

The successful outcome of this option requires a rational spatial planning of rural development (in the regions of the country), on terms and procedures to ensure:

- Establishment of land use control at the urban planning level and extension of semi-urban settlements and communities, with parallel establishment of zones for agricultural, industrial, residential, forestry or other socially beneficial use, in order to protect the "soil factor" which is in permanent narrowness and particularly to give priority to protection of the fertile cultivated land, which use should not be changed for any reason.
- Establishment of the material, intellectual and administrative stimulation of all efforts aimed at keeping the population in the countryside, and at the same time to stop or reduce the current of rural exodus and urbanization, by supporting the efforts that contribute to the highlight of archaeological, historical and the general cultural elements of the countryside and the efforts that highlight landscapes of special natural beauty, wetlands, neoclassical architecture, etc., which all constitute the framework for the development of agrotourism (Bellou 2009).
- The establishment of radical reforms in the agricultural sector to ensure the restructuring of crops, to stimulate the flexible industrial units of processing agricultural products, to reorganize agricultural cooperatives to function as model collective productive units, to promote rural culture, to reorganize rural areas and recreational sites. Reforms which will ultimately ensure the creation of new out-of-agricultural jobs in the countryside (Ministry of Agriculture Development and Food 2017 online update).
- Geographical selection of a network of semi-urban or small urban centers in the country through institutional interventions of logistical and intellectual stimulation of their "life" so that in the next 25 years they will develop into full and integrated urban centers with infrastructure and administration networks that guarantee employment, education, social welfare, recreation etc., which actually will guarantee the prosperity of their inhabitants.

10 Instead of Conclusion

Greek tourism, in sixty-eight (68) years (1950–2018), from a pariah of the national economy succeeded to become a real tourist industry, with a huge contribution to the overall development of the country, contributing to GDP with high percentages, offering employment in a significant percentage of the economically active population of the country and opening a promising growth outlook for the medium to long term. In the overall development strategy of Greece's tourism sector, agrotourism should be in the primary place for the re-structuring of the economic and social productive forces and through which the organization of the countryside will be taking place respecting "sustainability" and natural and the anthropogenic environment.

After 68 years of dominance of a peculiar economic and social "dualism" in Greece, it is time for the coordinated state to … reverse the dominant logic and intervene institutionally with strategic choices and policies to organize and restructure the development of the economy and the countryside on the axes we have already proposed and in which agrotourism should be the primary focus.

In conclusion, agrotourism contributes to the local development of an area, as well as being one of the main pillars of the Greek economy. In particular, rural tourism contributes to improving rural incomes, local agricultural and craft products, the attractiveness of rural areas and the quality of life and work of the rural population, the restraint of the rural population at the place of residence, the protection of the environment, the promotion and enhancement of the architectural and cultural heritage, the promotion and exploitation of new areas as tourist and traditional sites, the reduction of social costs and the support of healthy entrepreneurship (M.R.D.F. Ministry of Rural Development and Food (M.R.D.F.) 2010; Kampitaki 2007: 4).

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Chapter 15
Philoxenia as a Component of the Tourism Experience in Culture and Total Quality Management in Hotel Sector

Katsaitis Aristides and Papaefthimiou Efi

Abstract Philoxenia is a term that defines the culture of hosting in a way that gives priority to the guest not only concerning his needs but also concerning a genuine meeting among host and guest and the cultures they represent. Philoxenia ensures the framework for the sustainability of tourism development and is identified with its principles: the participation of the host society in tourism activity, preservation and respect for its cultural identity, respect for the natural environment, experiencing authenticity and a state of being like a local, for the tourist. Reference is made to the revival of the Delphic idea at the early 20th century as an experiment to bring together different cultures within the European continent in a multi-level meeting and feast. Philoxenia must be the main non-material component, the dominant idea that will penetrate all services, every single action or attitude in Tourism. This philosophy of tourism inevitably introduces to Total Quality Management and enhances the tourist product. As far as it concerns the Hotel sector quality service cannot be fragmented and in part, cannot be focal, it must be holistic. The Hotel product is made up of a set of products and services, but concerning the customer's perception is an holistic product. Finally, Philoxenia leads to the creation of a Tourist Culture in the meaning that Tourism as an economical sector, under these rules and principles becomes a cultural factor towards sustainability and development.

Keywords Culture and philoxenia · Meeting of cultures · Authentic experience of philoxenia · Philoxenia in hotel sector · Total quality management · Philosophy of tourism

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K. Aristides (✉) · P. Efi
Harokopio University, Athens, Greece
e-mail: ar_kats@otenet.gr

P. Efi
e-mail: efimiapapaefthimiou@gmail.com

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1 Introduction

The term “Philoxenia” is derived from the greek verb “philo” (= I love) and the adjective “foreign” (= the non-familiar, the non-community, the alien). It implies acceptance, protection and care for the stranger. The Greek name “foreigner” originally meant “guest” and in later years hired the concept of “unknown” or “alien”. Philoxenia, so as a meaning, as like a concept constitutes an amount of energy transferred from person to person. More specifically, it is about a positive energy produced by a person living in his own and familiar environment and is offered to a person, who is a stranger, visiting the host country for any reason and wishing to live there for a settled time period.

However, the word “Philoxenia” means more than an expression of “friendship with the stranger”. Thucydides in Pericles’ *Epitaph* (430 B.C) refers that the Athenians kept their city open to all the visitors, did not forbid strangers and did not prevent them from knowing and benefiting from the culture of Athens. Therefore, a basic element of philoxenia is the cultural meeting and exchange between the host and the guest or in terms of tourist terminology, between the host country and the tourist. The mood for philoxenia reveals mainly the willingness to meet and acquaintance with the stranger, in addition to the care and services to be provided. During the experience of philoxenia, takes place a mutual influence between a host-society open to the “foreigner” which wants to interact with him and the stranger who represents his own cultural identity and expectations.

The term “hospitality”, which is the official English translation of the word “philoxenia,” does not adequately reflect the above-mentioned meanings, since it is confined to the reception, care and protection of foreigners, but not indeed the generosity of the spirit and the openness of a culture. The term is also identified to the Hotel sector mainly and the businesses involved somehow with accommodation.

Every people has its own perceptions about hospitality which reflect the level of accepting and being friendly and open to the strangers. As far as it concerns Greek culture, Philoxenia has been a sacred constitute. In the poetic work of Ovidius *Metamorphoses (100 A.D)*, a legend is reported according to which Zeus and Hermes, were transformed to poor travelers, visiting a small village and seeking accommodation to spend the night. Everybody in the village drove them away in a bad manner, except of a poor old couple, with the names of Vafkida and Philemon. They offered to the foreigners food, wine and accommodation, and the Gods rewarded them with riches, transformed their poor hut into a luxurious marble temple and themselves into trees guarding the temple doors. This sacred host-guest relationship was protected by Zeus, the Father of all deities and was called “xenia”, now known as “philoxenia”. Thus, the stranger was considered to be a sacred person, always protected under the shield of the gods, and philoxenia followed a particular ritual given to every stranger, regardless of his origins and social status. Philoxenia allowed the coexistence of individuals from every social class, even ordinary citizens with kings. In Homer’s period, any stranger could find philoxenia and acceptance in any house. The same attitude was spread at all the Greek city - states, with the one and only exception of Sparta, which applied a kind of exiling strangers, not allowing foreigners to enter the city, considering philoxenia dangerous for its security.

The philoxenia ritual included parts that largely correspond to the different and multiple stages when visiting a tourist destination, such as the reception, the stay in the host country, the meeting and participation to the host culture and the departure from it, according to a special farewell ceremony. This ritual included the reception stage, during which the foreigner arrives at the host's house and gives wishes to him and to his family. When the time for departure comes the guest receives special gifts from the host to bring them back to his country. When a stranger appears, the master of the house set a meal in his honor. The stranger, after taking a bath, wears the luxurious garments offered by the host, and then he sits on a throne. The meal was usually lasting for long time, along with discussion and exchange of ideas, opinions, experiences. The stranger, after having all these, is guided inside the house and outside to the city, watching the works of art, listening to the music and the recitations of poems that took place for his amusement.

The evolution of the cities, with the development of trade, the cultivation of sciences and arts, the improvement of transportation gave as an outcome the increase of travelling, especially during periods of sports, festivals, religious celebrations. The Greek cities of ancient times, in these cases of cultural events and celebrations, they were accepting great number of visitors, but also representations from other cities. At that time, with the mediation of the state, some citizens were undertaking the responsibility of philoxenia. In this way they were representing the culture level of their city and thus the institution of public philoxenia was born. It created strong bonds of friendship and cooperation between cities, resulting conditions of mutual philoxenia and cultural exchanges. The protection of foreigners in each city was supervised by the "consuls", the official representatives of other cities, according to a special treaty, a kind of all participants consensus.

During Byzantine Empire and along Turkish domination, philoxenia was offered inside "guest premises" or "guest quarters" (rooms for guests), of monasteries, palaces and residences. Even today monasteries offer philoxenia to any guest asking for it, providing room and board.

Along with the reconstruction of countries, the social reformations and the more imperative need for commercial trading, philoxenia took a more complex shape and led to the first type of Hotel, mainly appeared near to oracles and temples. The continuous development of commerce created a greater housing problem, which was not possible for the public philoxenia to face. In-house private philoxenia declined and at the same time profiteering spirit of utilization of these guests, who needed room and board was generated. Private initiative organized the first public houses, which were accepting people and animals, were miserable as far as their appearance concern, without the necessary furniture while their staff consisted of slaves. Gradually, the Hostels and the first Hotels with more professional specifications and operation were formed.

Nowadays, new forms of accommodation had made their appearance but in this research, attention will be given to the Hotel sector and to how philoxenia, as a no-material component of the tourist product, affects the Total Quality Management.

2 Literature Review

The tourist is also a stranger who comes to the destination he has chosen. Although staying and spending on it is an economic phenomenon, philoxenia remains a key component of the tourist product in the sense that defines a type of sustainable tourism development with respect to the human "face" of this economic activity. In particular, philoxenia ensures the framework for the sustainability of tourism development and concentrates on its principles: the participation of the host society in tourism activity, preservation and respect for its cultural identity, respect for the natural environment, participation of the tourist in a genuine meeting with the host society and experiencing authenticity.

In contrast to mass tourism and the industrialized package tour (Zacharatos 2000) that emerged from a design reminding many of the uniform products that the industrial design has produced, new forms of tourism are promoting and pursuing the meeting of locals and tourists in the search for authentic and meaningful experiences, reproducing the basic experience of philoxenia.

The type of tourist who seeks to find the same conditions as the one he comes from, wishes to consume the type of food he consumes in his own country, stays in hotels all inclusive, has little contact with the local population, does not know the social and cultural reality of the host country, never essentially meets the host. In the perception of sustainability, this type of narcissistic tourist represents an outdated form. The tourists do not really want to experience the reflection of their own way of life, the preferences and habits to which they are used, but the authentic aspects of life in the host country. For Mc Cannell (1973), tourist embodies the seeking of authenticity and this pursuit represents a contemporary aspect of a global preoccupation with the sacred. It has been already mentioned that philoxenia is mainly the idea of the "sacred guest" and that perception directs all the actions and attitudes towards the guest.

That is very important for the sustainability of tourism development because it helps the host society to keep its cultural identity, remain genuine, protect the environment, maintain all the productive sectors of the economy, overcome seasonality, revive forgotten customs and local handicrafts, preserve the monuments, record and utilize the oral cultural heritage, in order to remain authentic, to remain "itself". Inside the frame of sustainable tourism development, tourist wishes to live in his vacation "like a local", to interact with people around him in the host country, to know and share their cultural authenticity and uniqueness, to be upgraded existentially.

Philoxenia, as a way of welcoming, meeting and exposing culture to the tourist destination, guarantees exactly the authenticity of the experience, favors the achievement of a genuine tourist meeting with the locals and virtually eliminates any neo-colonial type of communication and financial transaction. In terms of metaphor, we would say that philoxenia, as an intangible qualitative feature investing every transaction and meeting in Tourism, gives it a "face" and transforms it into a "relationship" more than an impersonal and mechanical financial transaction.

The design of cultural events for tourism should respond to the roots and the origins of culture in the host country, with the assistance of specialized scientists from various topics, such as archaeology, folklore, architecture, arts, as well as the help of local communities activated through various clubs and teams.

The case of the revival of the Delphic celebrations and the try this endeavor to take on a world-wide dimension, testifies precisely the dimensions that Philoxenia can take as a reason for meeting amongst people and cultures, ideas and ways of life and as a main concept for cultural tourism.

In 1927, the poet Angelos Sikelianos and his wife Eva captured the idea of reviving ancient culture in a way that it could be more experiential, holistic, timeless and they realized the first Delphic celebrations, with many cultural events that would revive the ancient Greek theater, the gymnastics and the music. At the same time, there would be exhibitions of folk art and dances revealing the uninterrupted continuity of Greek culture, from ancient to present form and expression. The ultimate goal was also to create a Global Cultural Amphictyon and a Delphic University that would aim at world peace and the unification of peoples. These priorities condensed the vision of the patrons and pioneers of the Delphic idea (Sikelianos, 1929).

The project was successfully crowned. In a manuscript written by Eva Sikelianou, we read: "I went down to the exhibition and were astonished. Each house was filled with beautiful treasures, all made by the peasants' hands. In each house an elderly lady wore the local costume of the province she represented, where her ancestors lived. All of Greece was gathered in this craft demonstration made by perfect craftsmen… as if in a dream I watched Prometheus. The State, the Violence and Hephaestus were good … the telegraph wires were constantly busy. The first news went to Athens, Paris, London, Rome, Lisbon. All that night Athens was in stimulation (Palmer-Sikelianou, 1992)." The celebrations were repeated in 1930, with Aeschylus' "Iketides". Greek culture was at the forefront of global interest and even at a time when there were no modern technological means of communication and information. After the efforts of Angelos and Eva Sikelianou, Linos Karzis tried to continue the Delphic Idea, when in 1952 he invited four top foreign actors to play in Aeschylus' "Prometheus Bonder" in as many languages.

However, the efforts did not bring the expected results, because neither the official Greek government nor EOT nor UNESCO helped to be established an International Delphic Festival. Angelos Sikelianos' vision, without the existence of a national tourism development plan, was doomed to abduct.

The Delphic Idea was the first attempt to create an International Festival that could attract to Greece tourists with particular interest in Greek culture and gradually to promote Greece internationally as the ultimate destination for having distinguished cultural experiences.

In the revival of the Delphic Idea, both the institution of Philoxenia and the institution of Consulness, found a new content with the promotion of culture as a tourist attraction and the exploitation of the comparative advantage of Greek culture as the cradle of European culture and also the culture that contributed the world with the ideals of Democracy, Arts, Sciences and Philosophy.

Philoxenia could be implemented in the Hotel sector in order to achieve Total Quality Management. The business needs of Hotels have increased greatly, both at the strategic management level and at the operational management level.

The needs of tourists are constantly changing. Their demands from the Hotel offer are different from the past, let alone when we are addressing τo the future and we are trying, through the dominant tendencies of customers, to understand what these future trends will be, what will be their expectations for Hotel services, in a social environment (which determines the values of the way of life), economic (which determines the relation of monetary value and emotional value by the Hotel services) and technology (which determines the means of production, distribution and consumption). The dominant issue in the business environment of Hotels is how they perceive the quality of both parts, namely the Hotel side and the customer side. The quality produced should be what they want and satisfy customers who consume it.

Quality should be the dominant feature in the philosophy of the hotel business that will give it the vision and lead it to results of total customer satisfaction that will exceed its expectations and excited is going to talk about his experience to others. The business will have gained confidence, and the customer will have become loyal and a kind of "ambassador". Quality service and human resources are the basis for the successful achievement of the business objectives of the hotel business and give it the strategic advantage to face the threatening environment (competition, economic crisis, etc.). The customer should feel the satisfaction of his needs emotionally and not simply be the result of a commercialized process where the hotel business provides him with what its class specifications define.

According to Vouza (1998), "Quality is a concept that is synonymous with the concepts of virtue and perfection as defined by the ancient Greek philosophers, Socrates, Aristotle and Plato. The latter states that virtue is a catalytic and integral concept that expresses "good" in its supreme form, and is the highest idea of all ideas. Even if quality is seen as something ideal, at the same time it is feasible, but not in the "tangible" reality and compatibility that characterizes everyday practice. Contemporary theoreticians such as Aktuf (1992), Pfeffer (1994), Wilkinson, et al. (1991) move in the same direction. They argue that quality does not have a traditional, mechanistic or procedural character and content, but is an integral part of a philosophical view of man and the values that surround him" (Vousas 1998, p. 19).

The philosophical view for quality improvement is primarily driven by business ethics dominated by "virtue" and it expresses "good". This approach can strengthen and consolidate customer loyalty for the products and services it produces.

Varvaressos and Sotiriadis (2003), “Quality is today a new management philosophy that involves the constant search and effort to improve all parts of production up to the final product or service (Tenner and De Toro, 1992 and Gilbert and Joshi, 1995). Jones & Lockwood also argue that quality should be seen as a key field of hotel results and not as a consequence of various other processes” (Varvaressos and Sotiriadis 2003, p. 4).

If we accept that quality is of strategic importance for the hotel business, Varvaressos and Sotiriadis (2003) report, “By accepting the reasoning that quality is a strategic issue—which means that it brings a reputation for excellence and long-term economic results—we can deny the notion that quality is more of a constituent element of the overall vision and entrepreneurial spirit. To achieve this, as mentioned by Berry et al., “Leaders are needed, not just managers, and real leaders:

have a vision for the business,
transfer their vision to the business/guide by giving the example,
have an entrepreneurial spirit,
have an obsession with excellent quality” (Berry et al. 1989), (Varvaressos and Sotiriadis 2003, pp. 5–6).

For the anthropocentric character of the T.Q.M, it is reported by Chyteri and Annan (2015), “Total quality management is an anthropocentric management philosophy that aims to constantly increase customer’s satisfaction at even lower cost levels. It is an holistic and systemic approach with an horizontal orientation that includes all employees and ranges from suppliers to customer service after sale. It focuses on learning and adapting to lasting change as key parameters for organizational success. The basis of total quality management is philosophical. It also includes systems, methods and tools and is distinguished by the emphasis on teamwork and individual contribution to the achievement of organizational goals (Evans and Lindsay 2007).

Total quality management requires a cultural transformation of the business so that all who involved in the production process, from top management to employees, are customer-oriented and constantly improving all processes (Bergman and Klefsjö 1994) (Leonidas, Annan Loucas, pp. 62, 2015).

Through the philosophy of total quality, the management of the hotel business should primarily consider its human resources as the most important and distinct ‘customers’. The hotel business should meet the particular needs of its executives, motivate them, mainly ethically, and make them a part of all this effort of total quality that will be diffused throughout the business for the best possible total service of the customer beyond their expectation, abolishing the limits of their parts so that it is the duty and responsibility of all the unique customer service as their sole purpose with team effort and common vision.

Quality service at the Hotel can not be fragmented and in part can not be focal, it must be holistic. The hotel product is made up of a set of products and services, but concerning the customer’s perception is an holistic product. The hotel product is:

good customer reception, courtesy and fast service in procedures, accommodation—overnight (environment, atmosphere, decoration, cleanliness-hygiene, safety, comfort, etc.), gastronomy (nutrition, entertainment, etc.).

Administrative actions and "behaviors" influence directly and to a large extent the actions or reactions of the human potential from which "behaviors" are generated that will be directly consumed by the client/tourist through his service. The hotel product is heterogeneous in terms of the products and services it produces. Also, the human potential is characterized by heterogeneity due to its different education and specialization. Ultimately, however, the product is one, the hotel, and what the customer perceives will not be separated to individual products and services. The customer would not think that the meal in the restaurant was great but the room was not clean, or that the service at the reception was very good but in the restaurant the service was poor.

The staff of the hotel are the people who will create the positive experience to the customer originated from quality services based mostly on authentic philoxenia. This kind of hosting will create in him the best memories and feelings that will share when return home.

The contribution of human resources is one of the most important parameters for excellent quality service, said Varvaressos and Sotiriadis (2003), "Hotel services mean that lack of smile, lack of service by the banker or receptionist, unpretentious food, unreliable booking and cold coffee are not easy to deal with, and even more, to check. Hotels give exams at any moment, through the incessant and varied interactions of their staff with their clients (Teare 1996). The good impression ultimately depends on the commitment of the company's own human resources, which takes full responsibility—after appropriate training in methods and techniques - for customer satisfaction. The «moment of truth» for the business is the same with the moment that the employee is confronted with the client complaining about the noise, the broken lock or the hard bed. The correct handling of the problem and, more importantly, the prevention of the problem, initially create a client's active advertiser at the hotel (Spanos, et al.)" (Varvaressos and Sotiriadis 2003, pp. 13–14).

Also, Varvaressos and Sotiriadis (2003), conclude: "Above all, however, is required a similar business culture and a spirit of operation. Appropriate culture implies primarily a commitment of the company to the philosophy, structures, procedures and practice of the TQM. It also means commitment to the principles of customer satisfaction, adaptation, improvement, innovation and engagement of human resources in the continuous improvement process. Finally, it is underlined that the issue of importance is not so much external recognition through one of the existing certification systems—for example the ISO standard—but a spirit, a business culture that implies passion, commitment and perseverance for exceptional quality service" (Varvaressos and Sotiriadis 2003, p. 16).

3 Research Method

This chapter refers to surveys have been made to probe the importance of philoxenia/hospitality in tourism destination. Philoxenia and Hospitality as synonyms in the essence of friendliness, openness and acceptance of the Other has been proven to be a high reason for selecting Greece as a destination. Albrecht and Zemce analyzed mathematically the supply of bad hospitality and its consequences to the financial results of the hotel business (Bafounis and Katsaitis, 2005a, b), more specifically: *"If a hotel does not supply the desirable service level, at a sample of ten customers within one day, only one of the visitors will mention his complaint to the personnel of the hotel. He or she will also have the opportunity to affect positively five other persons. In contrary, the nine persons that did not mention their complaints to the hotel, probably will never cooperate with the hotel again, while each one may speak with other 20 persons – namely totally 180 persons will have a bad impression for the hotel. If this model expands in order to cover a total year of dissatisfied customers, 68.985 persons (9 persons communicated it + 180 persons heard it = 189 persons X 365 days in one year) will have a negative impression for the hotel and 2.190 (1 persons communicated it + 5 persons heard it = 6 persons X 365 days in one year) persons will have positive opinion for the hotel"*, (Bardi 2000: 331).

The degree of importance that the visitors attach to a tourist destination is also depicted by researches conducted by the tourists, who have visited the destination and imprint the priority to the standards of their selections and the dimension of their satisfaction to their residence at the destination. A recent research for the Greek tourist destination, which was conducted by MRB HELLAS on behalf of the Greek Tourism Organization (E.O.T.) from 09 September 2005 until 02 October 2005, on a sample of 1.500 tourists at Athens, Thessaloniki, Heraclion, Rhodes airports and Patra's port (Tourism & Economy issue 314: 52–60) mentions: *"According to the results of the research, almost 97% of the tourists declares totally satisfied or rather satisfied with a positive impression for the natural beauty, the beaches, the philoxenia, the people, the food, the friendly/calm atmosphere, the politeness, the nutrition quality, the history/culture. As far as it concerns philoxenia element, the research showed:*

A. Which description suits to Greece?
(Prepared list with words/phrases)
Suits / Describes Greece very good: 69,1%

B. What were the initial reasons, initial incentives that lead you to choose Greece as a destination for vacation at this year?
Hospitality / Calm environment: 33,4%

Γ. Could you tell me what did you find more satisfactory during your visit in Greece?
Hospitality: 40,7% »

Also, another research for the satisfaction of the visitors in Athens that was conducted by Leo Burnett company on behalf of Municipality of Athens and the

Secretariat-General of Attica Periphery, (Tourism & Economy, issue 314: 61–76) reports: *"It is about a qualitative research of personal interviews and usage of questionnaire including open questions as well. The research was conducted to men and women aged 18 years old and above, who are permanent residents of abroad and had stayed overnight for at least one time at Attica Periphery. The research was carried out between 13 and 27 October 2005 at Eleftherios Venizelos airport. The results of the research referring to philoxenia element are the following:*

A. *One of the primary advantages of Athens is friendliness and philoxenia of the residents. To the question, **how much satisfied were you during your visit in Attica as far as concerns philoxenia/friendliness**, the answers showed:*

Very satisfied: ***41%***

84%

Fairly Satisfied: ***43%***

B. *From 1.039 asked persons, who have visited Attica during the past, **51,2% are very/fairly more satisfied in regard of their previous experience**.*

Friendliness and philoxenia
Safety feeling
Easiness of communication

Most primary factors of satisfaction were:

Γ. ***Evaluating the services of housing and catering concerning the service/ politeness of personnel, are:***

	Housing Services		Catering Services	
Very satisfied:	*45%*	*85%*	*32%*	*74%»*
Fairly satisfied:	*40%*		*42%*	

Philoxenia concerns every visitor and every need of his. The above researches depict that philoxenia represents one of the main priorities for the visitor.

Philoxenia feeling is the one that reinforce even more the satisfaction rather than any other more or less satisfaction or dissatisfaction that the tourist may have accepted from other tourist products/services and will have better memories.

The journey for the visitor will be a dream, which he imagines until he begins for the destination. His residence to the destination fills him with feelings while he compares what he had dreamt with what he lives at the destination/reality. At his departure, apart from his luggage, takes with him pictures and memories from his journey and at the country of his permanent residence, far from the tourist destination, makes his review. Feeling and memories will have the primary role when he speaks for this journey, for this destination to the people of his society.

Philoxenia assists in the reinforcement of positive memories and smooths out any negative elements or facts.

4 Research Results

Consequently, observing this entire time path, we notice the relation of philoxenia as an action of culture expression and a people's attitude towards traveling needs of people, who move for any kind of purpose.

Philoxenia started as a "good" that the human, as a civilized historical subject, was producing and providing generously yet nowadays it is produced within industrial standards into specific production units where it is cost and invoiced under financial parameters for the maximization of macroeconomic sizes of a tourist destination by the tourist activity and business action. Thus, it is cut from the basic philosophy of tourism, namely philoxenia, which was generously provided, and gradually encouraged peoples' movement and traveling.

Tourism itself produces civilization as an offspring of the dialectical relationship growing with the contact of the different folks characterized by different cultural elements. This particular dialectical relationship through the position and opposition of differences finally composes a significant tourist culture. Within this civilization one can find these communication elements—traces revealing the contact—of the different folks, the different civilizations, which however have a common benchmark, namely philoxenia that has been the primary substructure in order for this contact to be realized.

Philoxenia reflects the civilization index of a folk and a community. Culture constitutes the infrastructure for the qualitative characteristics of philoxenia (Fig. 1).

Tourist destination is composed by a set of miscellaneous elements such as geomorphology, physical, cultural, historical, general infrastructure, special infrastructure and social ones.

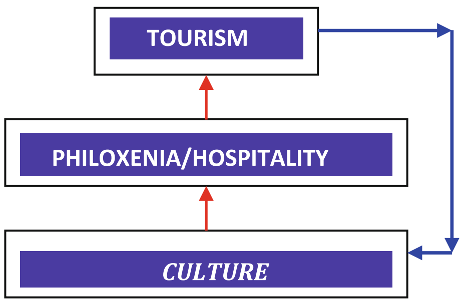

Fig. 1 Schematic representation of elements' supply: culture, philoxenia, tourism

Social elements compose the human society of a place and constitute the living capability, developing activity at social, cultural, political and financial—commercial level.

Human factor is the basic prerequisite for any kind of tourist activity at a destination—place and primary element, both on the side of supply and the side of demand.

Philoxenia is the unsubstantial good, which is produced and consumed by people, so by tourist supply as by tourist demand, respectively (Fig. 2).

The tourist product of a place or a wider geographical region, constitutes practically the destination for tourists, defines tourist destination. Tourist product is not just physical and cultural sightseeing or the existence of general and special tourist infrastructures. It is not just enough. Basically it is about contact, meeting, social engaging.

Demand certainly shapes the offer, but should not this be true in absolute terms? Is supply likely to affect demand towards macroeconomic targets, going from quick profit to sustainability? From a fully commercialized experience to a meeting experience, with an emphasis on humans?

Sightseeing and infrastructures are elements, which compose the inanimate tourist capability of a destination and are clearly completely necessary for the operation of any tourist activity. These elements are the ones that can be depicted by the several advertising publicity and promotion means and concern the image that the potential tourists can see at the various advertising means. What they cannot see and perceive as an image, unless they have arrived at the tourist destination, is the social and professional contact with the people, either as members of the tourist destination's society, or as members of any tourist professional sector.

The persons at the destination, are the tourist human resources independently of the position and the role they are having at the destination's tourist events. These human resources will provide the air, the touch and the identity into an aggregate and uniform tourist product, which will be identified with the culture, the habits, morals and rules, values, ideology, philosophy, way of life, history, civilization, religion and so many others composing the essential identity of a place, a folk. The identity of a folk is imprinted on any of its actions and attitudes. Philoxenia is the action and attitude towards a guest, who makes us the honor to visit our country.

Philoxenia is a fundamental and commendatory element of tourist businesses of destination. Besides, every tourist destination offers natural and cultural characteristics as well as general and special tourist infrastructure, proportionally of course to the capabilities of the financial, social, natural and cultural environment where they belong and the impacts that they accept.

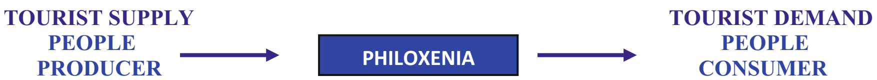

Fig. 2 Schematic representation of production and consumption of product philoxenia

The behavior of an entire society towards the tourist depicts the level of philoxenia and sets the elements for the generation of tourist culture in the time period that the tourist performances take place at the destination.

Tourist businessmen and professionals occupied at the tourist businesses are the direct producers of the tourist good named “philoxenia”, while the locals – residents of the destination, who are not involved in the production of any tourist activity, are the indirect producers of the same tourist good.

Tourist businessmen as far as concerns their investment selections, should be based on the philoxenia philosophy. Development and creation of tourist products must be governed by the concept of philoxenia and should cover the special needs of the visitor.

The professionals occupied at tourist businesses must comprehend that they produce philoxenia with any of their action and the visitor consumes it at the same time. This identification between the place and the time of tourist services' production and consumption does not leave any margins for mistakes. Also, the same professionals must realize that they serve the visitor in an active and meaningful way. This service should be as less pretended and formal as possible and more original and substantial.

The locals – residents, who are not involved in the tourist activity, however with their indirect participation they reflect the cultural infrastructure on the philoxenia's values, as well as the assimilation degree of this contact (local – visitor) on the total of the society.

For the tourist destination, philoxenia issue constitutes the cornerstone for its successful tourist business activity and is the bet that should be won. Success or failure of philoxenia supply often appoints the success or failure of the tourist destination as well. The correct use of opportunities for philoxenia supply is very important. Natural or other sightseeing of a tourist destination will attract the prospective tourist, who will be affected by the advertising and promotion means or by any other way, in order to visit the suggested tourist destination. However, in case that he will not feel the philoxenia spirit, he will not visit this tourist destination in the future and he will not recommend it to the social environment of his country.

5 Conclusions and Suggestions

Philoxenia can ensure the authenticity of cultural experiences at a tourist destination because it is connected with history, traditions, myths, way of life at the host society. However, philoxenia is the result of fermentation of numerous elements, such as social, cultural, folklore, anthropological, geographical, historical, financial, environmental. The experiment of the revival of Delphic idea, 70 years ago, showed how experiences in Cultural tourism should be planned in order to combine the past and present dimensions of the culture as well as its different aspects. The constitution of Philoxenia is not just a simple concept or simply an idea. It is a modus vivendi, a way of life and thinking of people living in the host society having realized the value of tourism with central person the tourist/visitor. Philoxenia will generate the determinant between other competitive products.

If philoxenia could become the "feast of meeting" of different people and different cultures, then it might be possible a "Tourism Culture" to be emerged, based on the values and principles of philoxenia.

Philoxenia also consists the main component, a non-material one that should penetrate all services and activities in the Hotel sector aiming the goal of achieving Total Quality Management. The human resources of the Hotel business are personalized due to direct contact with the customer. Also, the spatio-temporal identification of production and consumption makes this a necessary condition so that the service produced by the human potential, aims at achieving the best customer service with zero margin of error. Philoxenia is directly connected with the satisfaction of the special needs of every customer. In this way it contributes to the pleasant stay of the visitor and assists in the developing of the distinguised memory. The unsuccessful effort of supply will lead to shrinkage of the tourist traveling, increase of complaints and defamation, concluding to financial consequences for the tourist destination. The visitor, who does not accept hospitable treatment, will certainly choose in the future a competitive tourist destination and at the same time he will affect others as well to that direction of avoiding the unsatisfactory destination.

So, is it possible the orientation towards authentic philoxenia to lead the Hotel business to a model of administration of excellent quality service to the guest? What this model could be, on what terms and what philosophy? Applying a Total Quality Management model is what will contribute to the upgrading of the quality Hotel services produced, expressed through the "professional behavior" of the human potential to produce an authentic holistic type of philoxenia. How can the customer feel the authenticity of the philoxenia? Total Quality Management can support and produce spontaneous service excellence with authentic interaction, in other words implementing philoxenia, exploiting its cultural heritage.

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Chapter 16
Museum Cluster in a Small City: Evidence from Russia

Marina Sheresheva and Elena Kondyukova

Abstract The article reveals the specificity of small museum forms that have developed over the past decade. The case of the small peripheral Urals city Irbit analyzed in the context of the cultural urban environment. The opportunities to form museum cluster in Irbit identified, strengths and weaknesses of prospective cluster development discussed, and recommendations for small museums further development offered, with special attention paid to logistics, technical equipment and infrastructure issues.

Keywords Museum · Small city · Culture · Digital technologies Tourism · Russia

JEL Classification R110 · Z320 · Z110

1 Introduction

Digitalization and intensified information flows lead to the increased diversity of museums (Given and McTavish 2010; Srinivasan et al. 2010). At the same time, in the era of mobile technology and globalization, the self-knowledge motivation comes to the forefront instead of simple aesthetic/knowledge motivations in tourism (Alebaki et al. 2015; Canavan 2018). In the mainstream of post-industrialization, a new type of tourist has emerged, wishing to participate not in mass projects, but in "self-realization performance", that is, to travel with the aim to live the ordinary life of another culture and to "try on" social and cultural personal roles that are not always applicable in his real life.

M. Sheresheva (✉)
Lomonosov Moscow State University, Moscow, Russia
e-mail: m.sheresheva@mail.ru

E. Kondyukova
Ural Federal University, Ekaterinburg, Russia

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Interactive “small forms” proposed by many contemporary museums correspond to individual needs for attention to self-esteem and deep concentration on unique individual experiences. Large museum complexes are not always able to satisfy this need. A small museum, on the contrary, is well suited to organize a deep individual dialogue with visitors, revealing its uniqueness in the implementation of cultural communications. Moreover, in the context of anti-globalization, small museums play a significant role, since they can in a certain way help in protecting and preserving cultural identity, resist leveling of individuality, and build opportunities to travel outside traditional “mass culture” tourist routes.

In the article the prospects and specifics of small museum forms in Russian small cities are discussed, the case of the small city Irbit being in the focus. This city located in Urals possess museum collections that can attract tourist flows.

2 Small Museums: A New Role in the Contemporary World

Taking in account the shift of cultural tourism to new experiences in the post-modernism environment, contemporary museum is not a simple storage of traditional and elitist culture (Hein 2000; Macdonald 2003; Weil 2012; Katsoni, 2015; Alexander et al. 2017). While in the past the prime function of museums was to gather, preserve, and study objects (Gilmore, Rentschner, Gilmore and Rentschler 2002; Alcaraz et al. 2009), now the role of museums as laboratories of modern culture is being accentuated in the world museology (McCall and Gray 2014; Ernst et al. 2016). As Tony Bernett underlines, the laboratory analogy is a productive one in drawing attention to the ways in which the museological deployment of knowledge “brings objects together in new configurations, making new realities and relationships both thinkable and perceptible” (Bennett 2005, p. 7).

With the development of digitalization and information flows, the diversity of museums is increasing. There are also new museum forms such as para-museums and quasi-museums. Para-museums are cultural institutions that exhibit not genuine museum items, but reproductions of art or digital objects specially created to illustrate historical or scientific events and phenomena. Such museums can be very mobile, moving themed expositions from city to city, displaying wax figures, ultra-quality giga pixel reproductions of works of art, installations, etc., and organizing performances. An example of para-museum in Russia is the huge multimedia park “Russia is My History”, opened on September 4, 2017 in Yekaterinburg, the Sverdlovsk Region, covering historical facts from the rise of ancient Russia to modern history. The institution includes 26 halls filled with interactive panels and monitors with updated content. Quests, lecture halls, concerts, meeting famous people complement visiting these museums. Quasi-museums are museums-surrogates that have both their own collections of authentic items, and high-quality copies of works of art. “Quasi” arise as technologies of augmented reality to well-known, well-established museum forms, expanding the range of cultural-cognitive, and, most importantly, service opportunities. There are also museums dedicated to stars of the entertainment and mass media industries, to commercial products such as Coca-Cola, etc.

As to small museums, their phenomenon and their new role in the society become revealed when compared with large museums that have the large-scale coverage of audience and assume a broad thematic and stylistic orientation of expositions. Large museums combine many functions, including aesthetic, cultural, social, research functions, and thus exert a significant influence on the artistic and historical processes in society. Still, the value proposition of large museums cannot meet all the needs of contemporary visitors. In the conditions of globalization and fast development of digital technologies, small museums become full partners of world-class museums and complement the range of needs that are not fully realized in large museum complexes: these are visitor's needs for concentration, psychology, and unique attention (Matelic 2011).

Actively using the technologies of globalization, being built into the structure of smart cities and settlements, small museums can in a certain way resist "globalization" as a phenomenon, protecting and preserving cultural identity. As Gilmore & Rentschner underline, "diversity, degree of variability and complexity of individual customer service requirements are valid experiences in museums" (Gilmore and Rentschner 2002, p. 758), therefore the use and recognition of informal networks are important, that can help to enlarge the boundary of the museum to the local community and even to the whole nation (Hsin-Yi-Lo 2010; Hua Lin 2013).

In this regard, it is important to understand that the traditional approaches to the small museums management do not meet the requirements of the modern environment (Reibel 2017): "small museum boards need to model the transformation that they desire by becoming change agents, building support for change and organizational capacity, and becoming more effective governing bodies" (Matelic 2011, p. 160). Many experts underline that in order for the museum business to be adequately represented in the cultural space, it is crucial to pay special attention to digital technologies, and to adjust management practices to meet these new requirements (Parry 2007; Kidd 2016; Rose 2016; Vasiliadis et al. 2016). In fact, contemporary small museum management is responsible for transforming museums into smart and sustainable organizations, into social entrepreneurs that are ready to address what matters in their communities (Matelic 2011; Stocks 2014).

One can divide small museums into different groups with pronounced tasks and programs, depending on the specifics of the initial collecting organization, namely educational, industrial, thematic, monographic, ethnic, or elite museums. What is most important, any of these types can be highly successful if properly targeting visitors' needs and using digital technology. Actually, when small museum fix the uniqueness of people, territory, habitat in the forms of spirituality, this can sometimes even change the economic destiny of the region.

Thus, the construction of the Guggenheim Museum of Modern Art in 1997 transformed the decrepit port city of Bilbao (Spain) into a landmark tourist destination (Guggenheim 2018). By 2018, the museum was visited by more than 20 million tourists, including more than 60 % from overseas. The financial flows attracted by the museum stimulate economic activity of Bilbao. Tax revenues were enough to develop a cluster with a new system of underground, shopping complexes, and the Bilbao airport. "The project and its ripple effects have created more than 5000 local jobs and generated €650 million of additional revenue for the Basque treasury" (Artnet 2018).

The stunning success of the Guggenheim museum enterprise got the name of "the Bilbao effect". This effect is now observed in growing number of places that were previously looked fully unpromising as tourist destinations. For example, the Dinosaurs Provincial Park in Canada located 200 km from the large city of Calgary attracts thousands of tourists every weekend (Alberta Parks 2018).

In contemporary Russia, there are some big and famous museums, mostly in Moscow and Saint-Petersburg, that are highly successful. At the same time, many small single-city museums faced huge challenges in the harsh conditions of post-Soviet economic destabilization and share the bitter fate of depressed areas (Sheresheva and Kolkov 2018). Therefore, they are in need to restore their activities, to adopt and put on best practices of small museum management.

In this paper, we discuss a case of museum and tourism cluster development in the small Russian city Irbit located in the Urals. We consider this case as a probable scenario to boost tourism using attractiveness of small unique museums that can develop a collaborative network embedded into a "smart city ecosystem" (Gretzel et al. 2015) development.

3 Methodology

The empirical study presented in the paper draws on the case method (Eisenhardt and Graebner 2007; Yin 2017). The case study approach implies the detailed examination of a single example of a class of phenomena, it allows to retain the holistic characteristics of real-life events and provides good theoretical insights (Dyer and Wilkins, 1991). Empirical material obtained in the form of in-depth interviews with key informants as well as by means of observation and analyzing documents helped us to disclose the problems and prospects of museum business in Irbit city and their possible contribution to the development of tourism in the Sverdlovsk Region.

4 A Case of the Small Russian City Irbit

4.1 Location, History and Cultural Environment of the Irbit City

Irbit city is located in the Sverdlovsk Region (Sverdlovskaya Oblast), the largest region of the Urals, located on the border between Europe and Asia in the Urals Federal District. This region is one of the leading Russian cultural centers that comprises over 1500 natural landmarks, historical, architectural and archaeological landmarks, including 14 historic cities and 228 cultural heritage sites; 486 museums and museum complexes; 915 cultural and entertainment facilities including 76 theatres; over 300 Russian Orthodox parishes including 14 operating monasteries and 11 cathedrals, which represent cultural monuments of the 18th century (PwC, 2015). In the last decades, the museum network of the Urals has grown almost threefold, in which more than half account for museums of small cities and villages.

At the same time, small historical settlements of the Urals fell into a vicious circle. Architectural monuments that are subject to restoration, lack of cozy economy-class hotels and logistics hamper tourist flows growth, and this adds to the scarcity of financial injections into development of these settlements, including the development of the museum and tourism business.

Irbit is a good example of small historical city in Urals. It was founded in 1631 under the name Irbirskaya Sloboda. This small city (about 40 thousand citizens) is situated 204 km to the East from the regional center Ekaterinburg, on the right bank of the river Nitsa. There is a city park in the north part of Irbit, a picturesque forest zone with pine trees in the south part, and natural reserve Vyazovaya Roschtsha (Elm Grove) is to the east.

Since 1738 an annual Irbit Fair was held in the city. This fair acquired the all-Russian significance, serving as a major trans-shipment point between the Urals and Siberia, Europe and Asia. In February 1776 Irbit received its own coat of arms. Since 1821, Irbit was built according to the master plan as a city-fair with the creation of a single architectural ensemble. This is now a valuable part of the Irbit historical and cultural heritage. The fair formed the historic center of the city—GostinyDvor (Guest Yard), shopping buildings, Passage (covered gallery with commercial premises), Sretenskaya church. Lacy brick patterns of ancient buildings are unique. The industrial architecture is represented by the complexes of the distillery and the mill of the merchant Zyazin. There are now 68 monuments of city planning and architecture in Irbit, as well as 11 historical monuments (Irbit 2018). Two historical quarters of the city are assigned to the protected area which will serve as a kind of open-air museum with samples of the urban environment of Irbit and its complex restoration.

Since the end of the eighteenth century the role of the Irbit Fair has declined due to the launch of the Trans-Siberian Railway and the gradual shallowing of the previously navigable river Nitsa. As a result, the economic center moved from Irbit to the city of Ekaterinburg, the modern capital of the Urals.

In the Soviet times, in 1930s, Irbit became an industrial city where an auto trailer plant was functioning. During the Great Patriotic War (1941–1945), a motorcycle factory from Moscow, as well as the chemist-pharmaceutical plant Akrihim, the Konstantinovsky glass factory and the Leningrad porcelain factory were evacuated to Irbit. In the post-war years, in addition to traditional industries, metal processing, the production of building materials, and the chemical and light industry were developed in the city.

Table 1 Irbit museums and cultural centers/clubs

Type of ownership	Museum name	Internet sites
State budgetary museums	Irbit State Museum of Fine Arts (ISMFI) with the three branches: 1. Exhibition Center 2. Museum of Engraving and Drawing 3. Museum of Urals Art	http://www.irbitgmii.ru http://rusmuseumvrm.ru/data/offices/irbit/index.php#slide-2 (Virtual Branch of the State Russian Museum in Irbit) http://www.k-w-a.ru (the museum director V. A. Karpov personal page)
	Irbit State Museum of Motorcycles	http://www.gbuksoigmm.ru
Municipal museums	Irbit Historical and Ethnographic Museum	http://irbitiem.ru
	Motorcycle Culture Center Motodom	http://motodom66.ru
Private museum	Irbit Museum of Folk Life	http://irbit-imnb.ru
Centers and clubs	Motorcycle Design Studio Tourist bike club "Meteor" Carting club "Ural" at the Motorcycle Center	http://motodom66.ru https://vk.com/centremoto
	Information and Education Center at IGMII	http://www.irbitgmii.ru/museum/mv

In Irbit one of the oldest theaters of the Urals is preserved—the Irbitsky Drama Theater named after the Russian writer A.N. Ostrovsky, created in 1846. There is also a branch of the Sverdlovsk State Academic Philharmonic in the city.

A number of museums function in the city, namely the Irbit State Museum of Fine Arts, the Museum of Urals Arts, the State Museum of Urals, the Historical and Ethnographic Museum, the private Museum of Folk Life, and the unique State Museum of Motorcycles with its great collection of rare Soviet and foreign models of motorcycles (Table 1).

Taking in account the richness of museum collections in Irbit, the idea to form a museum and tourist cluster under the name "Irbit: the Wheel of History" emerged in accordance with the "Strategy for the Development of Incoming and Entry Tourism in the Sverdlovsk Region until 2030" and "The Concept of the Museum Area Development in the Sverdlovsk Region until 2020".

4.2 *Irbit Museum Cluster—A New Project*

In Russia, the opinion still prevails that small museums have weak audience coverage and low influence on the on socio-cultural and artistic processes. It is commonly believed that collections of small museums have typological exhibits of the "second" and "third" level, telling visitors about the subject-cultural existence of the local area.

Indeed, museum of a small settlement, as a rule, represents a cultural dominant of a limited region, form social processes of life of the local community. However, the unique specificity of Irbit is that its museums are famous for collections of world significance, a wide thematic, specific and style orientation. The collection of the Irbit State Museum of Fine Arts (ISMFI) has more than fourteen thousand works, including the works of Durer, Titian, Tintoretto, van Dyck, Rembrandt, Pissarro, Toulouse-Lautrec, Chagall. A rich exposition of many thousands of Western European paintings and etchings looks very unusual for the Ural province.

In these collections rare masterpieces are suddenly "sought out" from time to time, which becomes a kind of cultural sensation, causing a keen interest of the public. The events of the high-value art objects discovery often are overgrown with legends and riddles. In this case, the small museum can claim the position of the spiritual and educational center of the region and in the foreseeable future attract stable flows of tourists, discovering the "Bilbao effect".

Thus, in 2012, the Irbit State Museum of Fine Arts discovered the original painting by P. Rubens "Penitent Mary Magdalene and her sister Martha", which lay in the Hermitage's storages until 1975 and was then presented to the opening of the Irbit Museum as a perfect copy. Earlier it was believed that the original Rubens is in the Vienna Museum of Art History. A chemical analysis conducted by the team of Russian and international experts confirmed that the painting from the Irbit museum is older than the "Viennese" copy. Today, the insurance value of this masterpiece is about $100 million (It's My City, 2012).

Museum of engraving and drawing, a branch of ISMFI, is located in the former shopping arcade of the Irbit Fair, an architectural monument of the second half of the nineteenth century. The rich exposition includes engravings and drawings of European masters of the XV-XX centuries.

Museum of Ural Art, another branch of ISMFI, is located in the historical center of the city, an architectural monument of the late XIX century, the former house of merchants Kazantsev. There are the works of art of the Ural masters of the 20th century in the exposition: painting, graphics, sculpture, objects of jewelry and arts and crafts.

The Irbit Historical and Ethnographic Museum was founded in 1883 as a pedagogical museum, later it became public. Now there are the expositions of everyday life, of items and goods of the Irbit Fair, Eastern porcelain, collections of Russian icons and church relics, and the special exposition of fossil animals of the Urals.

The Irbit Museum of Folk Life founded by the collector Mikhail Smerdov is located in the building of an old vodka plant. The museum which is also is called "a box with surprises" exhibits the largest collection of samovars, ranging from a small "Egoist" (100 g) to the huge one (415 L), mounted on a motorcycle, from which a total of 2500 people can drink tea simultaneously. In the museum tea parties are held, pancakes are cooked in a Russian oven. The director of the museum treats guests with traditional Russian liqueurs of his own making.

A very special place in Irbit is occupied by the Irbit State Museum of Motorcycles, the only motorcycle museum in the Urals (Fig. 1). This museum was opened for visitors in 2003. At the heart of his collection there is a unique collection

Fig. 1 Irbit motorcycle museum

of “heavy” motorcycles belonging to the Irbit Motorcycle Plant. In the main section of the exposition there is an evolution of the domestic motorcycle, starting with the first army model M-72 and ending with the last model of the twentieth century. Significant value is represented by models of foreign production, issued from 1936 to 1984. The museum is the only scientific and technical center of its kind, representing domestic heavy motorcycle construction. Irbit is permeated with echoes of motorcycle culture, and people joke that “the blood of every Irbit citizen is diluted with gasoline and engine oil”.

Every year on the basis of the State Motorcycle Museum international rallies of bikers “Irbit—Motorcycle Capital of the Urals”, moto festivals and moto crosses are held. The motorcycle culture center “Motodom” that exposes customized (made in a single copy) motorcycles and cars holds an annual inter-regional festival of motorcycle culture.

In 2017, “Motorcycle Design Studio” appeared in Irbit. This is a quasi-form of the State Motorcycle Museum and motorcycle culture center “Motodom”, with a private collection of the legendary auto- and moto-technology and original forms (motorcycle truck, motor-car, retro cars). A number of clubs—Motocross, Carting, Retro, Meteor -are functioning as the daughter objects of the “Motordom”.

The fame of the Irbit museums due to their diverse representation in the information environment, can help to activate the tourist image of the cities of the Sverdlovsk region, first as local tourist destinations, and then probably as attractive destinations for foreign guests.

As the social environment for the functioning of museums becomes more complex, the technologies of partnerships and networking, fundraising and seeking for all kinds of resources for the implementation of museum projects allow diversifying sources of financing.

The Irbit museums are in the process of accumulating and sharing their own communications and technologies, such as security, storage, attribution, conservation, restoration and reconstruction technologies, cultural communication technology, scientific and artistic interpretation, technology of scientific and artistic expertise, hospitality technology, event organization and museum and pedagogical programs, art therapy, environmental technology, exposition and exhibition design.

V. Karpov, Director of the Irbit State Museum of Fine Arts, established long-term business relations with leading museums in Russia and Europe, which helped him not only to form a value fund, but also to assemble a rich scientific library, to open a restoration workshop and the Virtual Branch of the State Russian Museum.

For several years the Irbit State Museum of Fine Arts has been operating a cinema-video-lecture hall. The editorial and publishing department and the photo studio of the ISMFI provide preparation of electronic versions of publications, digitalization of scientific and inventory documentation, maintenance of the computer network of the museum. In 2005 ISMFI opened the People's University of Culture, which provides twelve educational programs, including video lectures for students studying foreign languages, a Club of Arts Fans, and a Music Department. An important direction of educational activity in the museum is holding contests and master classes (for example, stone carving arts), programs for gifted children and people with disabilities.

On the website of the State Motorcycle Museum, an investment project of a tourist complex with its own infrastructure called "Irbit: the Wheel of History" was presented. This project was developed purposefully, keeping in mind that the "old" and "outlandish" Irbit can use a number of competitive advantages in combination with new technologies to become a significant center of tourism. To create this tourist complex, capital investments from private and budgetary sources have to be accumulated, including the resources invested in the framework of the program "Development of the Sphere of Culture in the Irbit city for 2017–2020". This new project can serve as a pivot for cooperating and combining resources in the process of museum clustering.

In spite of these cultural treasures of Irbit, there are great challenges and impediments that prevent the city from turning into the highly attractive tourist destination, even for local tourism. The Russian specificity of spatial existence presupposes significant distances between the centers of economic activity, the presence of remote territories, which generates a significant inequality in access to infrastructure and services. Infrastructure problems in case of Irbit have not yet been resolved. Hotels in the city practically do not meet the standard requirements of the guest accommodation, they allow accommodation of less than a hundred low-demanding guests. In fact, the main stream of visitors are schoolchildren coming for one-day excursions and residents of closely located settlements. The current state of logistic and transport arteries does not allow Irbit to attract thousands of tourists every weekend like the above-mentioned Dinosaurs Provincial Park, although Irbit is located in exactly the same accessibility from Ekaterinburg (200 km) as the Dinosaurs Provincial Park from Calgary.

Therefore, there is obvious need for new management decisions, in terms of fundraising, use of scarce resources, and museum marketing based on the support of digital technologies that help to overcome the risk of remaining unknown to most of the world due to territorial remoteness.

5 Recommendations for the Development of the Irbit Museum Cluster

As a result of case study, after analyzing the challenges facing Irbit museums and opportunities to collaborate and combine resources, following activities can be proposed for the development of the Irbit Museum Cluster “Irbit: the Wheel of History”.

1. To improve the existing technologies that have proved themselves in the practical work of museums: visit- and service centers, “live expositions”, virtual museums, art residences, etc. Digital exhibits are to be actively included in the real space of museums. Interactive technologies should be reflected in the concept of development of each Irbit museum. Virtual models of museums will offer the viewer an acquaintance with funds, expositions, electronic publications united on a thematic, regional, problematic or other principle of selecting artifacts that are actually located in different places and even do not constitute collections.
2. To boost the role of all Irbit museums as a network of communication centers. In addition to sites, electronic catalogs, video and audio resources, museums need to expand their presence in social networks, mobile devices, Internet projects. To adopt the ideology of the “open museum” built on the basis of the development of interactive forms, co-authorship and co-creation.
3. To pay special attention to feedback from the public, to the opinions, information, ideas that can be uses to improve museum activities. Gradually the museums will become an indispensable element of the social transmission of knowledge and values.
4. To form a special educational space for museum communication as a partner of educational institutions. Using a variety of information channels, museums can broadcast values and knowledge superior in quality to educational auditoriums.

5. Private investments that are needed to be added to the municipal investments can be attracted on the regional level. The Sverdlovsk Region is an offshore for investors who are exempt from income and property tax for five years. The Tourism Development Center of the Sverdlovsk Region helps potential investors to issue the necessary package of documents for investments in museum and tourist facilities. Federal Target Program “Development of domestic and incoming tourism in the Russian Federation (2019–2025)” can also be useful as a source of additional resources: this Program gives priority to the cluster approach in tourism and to the cultural tourism as one of the five priority types of tourism in Russia.

6 Conclusion

As the spiritual needs of people change, the role of small museums also changes. Since the needs evolve from the traditional forms of knowledge to self-knowledge, museum and tourist sphere transforms into a way of person self-realization. The individual is interested to know not only how ancient people or representatives of other ethnic groups lived, it is desirable for him to “try” on himself social, cultural personal roles. A phenomenon arises that can be characterized as a personal interactive interaction—“the museum and myself”.

The development of contemporary museum as a unique space for multi-level communication becomes a special area of activity, while digital and interactive innovations change the nature of the audience’s interaction with museum exhibits, significantly expand the circle of visitors. The interest of potential audience becomes the main indicator of successful museum management. Digital opportunities help to enhance the influence of museums on the quality of life, shape culture as a resource for sustainable development and enhance the influence of museums on the quality of life, expanding the field of access to cultural goods, education, social communications, and leisure.

In this regard, small museums are an original phenomenon that mirrors major changes in social and cultural practice. A small museum can in a certain way resist “scaling” as a phenomenon, since it is able to organize a deep individual dialogue with every visitor, revealing its uniqueness in the implementation of cultural communications, protecting and preserving local and national cultural identity. In other words, small museums are able to meet the challenge by introducing mobile “small” forms and fulfilling the task of contemporary museum “to establish millions of dialogues”.

The degree of small museum involvement in the information and communication processes determine its role, significance and effectiveness in the sociocultural space. The main idea of digital communications is the absence of geographical boundaries. Thanks to the technologies of augmented and virtual reality, one can become a visitor to the museum of any, even small and hard-to-reach settlement.

The case of the small city Irbit located in the Urals shows that many small Russian settlements have a significant tourist potential. Irbit city possess museum collections that can attract tourist flows and contribute substantially to the transformation of the Sverdlovsk Region into a spiritual and educational center of the Urals. To implement the proposed recommendations, digitalization and attractive investment conditions with a "tax break" for business are well suited, as well as small cities and villages local community involvement, and intensified networking of small cities and small museums, both between each other, and with bigger cities and museums.

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Chapter 17
Tourist Sub-destinations: Shedding Light on a Neglected Touristic Behavior

Markos-Marios Tsogas, Evangelia Chatzopoulou and Iliana Savva

Abstract The main objective of this paper is shed light on a neglected topic of Tourism Research: That of the destination decision making of tourists, when they decide on visiting a sub-destination within a primary one. The key characteristics of those tourists and their unique perceptions of value are unveiled, by juxtaposing them against the corresponding characteristics and value perception of tourists that visit the same destination as a main and primary one. The factors that have to be taken into consideration when measuring the image of a destination as a sub-destination, are examined. A self-administered questionnaire is used, whereas the location of the survey is the island of Aegina, an important and well known sub-destination of Athens, in Greece. The results indicate that there are significant differences between our two main groups of tourists, as hypothesized, even in their perceptions of value. This paper is viewed as one of the very first attempts to empirically test the criteria and reasons tourists decide to visit a sub-destination. A number of implications for the practice of marketing of tourism destinations are being developed, mainly by identifying the target markets that visit a sub-destination. The understanding the reasons for visiting sub-destinations and the value that tourists derive from their visits, enables the development of solid marketing programs, targeted at the enhancement of the experience of tourists in sub-destinations.

Keywords Sub-destination · Secondary destination · Tourism · Value

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M.-M. Tsogas
University of Piraeus, Piraeus, Greece

E. Chatzopoulou (✉)
TEI of Western Greece, Athens, Greece
e-mail: ev.chatzop@gmail.com

I. Savva
Athens University of Economics and Business, Athens, Greece

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1 Introduction

Tourism comprises of many marketing aspects and connects them, involving not only the visitor profiles and their perceived evaluation but also the destination profile and image (Lee and Tussyadiah 2011). Segmentation in today's travel environment is unique, unprecedented and infinitely more complex with many niches. In the past, it was common practice to segment the holiday market along traditional uni-dimensional lines of sex, age and income. Today, one has to be much more sophisticated when markets are segmented (Lau and McKercher 2006; Levitt et al. 2017). Specifically, cluster segments of the vacation market must be catered for based on arrays of multi- optioned needs and consumer characteristics (Stepchenkova et al. 2015). This means that the choice is not between sun or fun holidays; young or old; male or female; but rather, creative holiday combinations which incorporate a cluster of market requirements. The key challenge for travel suppliers is to understand the components and composition of these cluster segments and to determine in which cluster an organization can gain a competitive advantage. An important yet largely neglected in the literature segment of Tourists are those who visit a number of sub-destinations within a main or principal one. In Greece this behavior is empirically well documented and has been given special names, like "The Classic Path" (Includes visits to Meteora, Delfi, Ancient Olympia and Epidaurus) or "Island Hoping" (Visits to a number of Aegean Sea Islands, usually on the local ferries). The island of Aegina is a small yet very beautiful island of the main port of Athens, Piraeus and has been for decades either a place for restful vacations of families or the place of short excursions for those who want to experience the beauty of Greek islands while visiting the main attractions of Athens.

The main purpose of this paper is to investigate the characteristics and perceptions of value of those that visit a sub-destination and the differences between them and those that perceive the same destination as a primary destination during their vacations. The importance of the subject lies on the fact that by understanding the reasons for visiting sub-destinations and the value that tourists derive from their visits, enables the development of solid marketing programs targeted at the enhancement of the experience of tourists in sub-destinations.

2 Literature Review

2.1 Marketing of Tourism Destination

The choices that tourists make concerning their destination are being influenced by the images that they have for each and every destination (Buhalis 2000). According to Baloglu and Brinberg (1997), image differentiates tourist destinations from each other and is an integral and influential part of the traveler's decision process. One of the main reasons why is this happening is the intangibility of destinations which are part of the tourism and travel services. Tourists cannot fully assess the choice of the destination that they have made, before experiencing it (Baloglu and Mangaloglu 2001).

In recent years the destination marketing organizations (DMOs) are trying to attract travelers and are in a continuous competition due to the fact that destinations are becoming more and more substitutable. This substitutability of destinations is the result of the growing global competition (Ekinci 2006). Tourist destinations seek to be distinctive and the—personality of each destination is been used to that effect. Each destination has its own unique identity that differentiates it from other destinations (Carballo et al. 2015).

According to past research, destination image consists of both cognitive and affective components (Seraphin et al. 2016). In addition, past research shows that the destination image and the line of tourists recommending it using word of mouth are directly connected (Ekinci 2006). Another direct connection has been established between the destination's image and the tourist expectations (Middleton 2001). Thus, it's crucial to develop a distinct identity for a destination, since this will enable the positioning and the differentiation of this destination in the tourist market.

The mature destinations should reexamine their marketing and communication strategies so as to follow the challenges of the world-wide competition (Minghetti 2001). On the other hand, it's crucial for the destinations that emerge to identify their target markets and create a strong, competitive brand (Minghetti 2001). It is important for a destination to offer to tourists an experience that will be superior when it is compared to the experience being offered by other destinations (Dwyer 2003).

According to Leisen (2001), different segments of tourists perceive differently each destination. It‘s of a great importance to match the destination image with the customer psychographic profile so as to improve the positioning (Yankelovich and Meer 2006; Ronkainen and Woodside 1978). In addition, the destination image should be matched with lifestyle variables (Gonzalez and Bello 2002); activities (Woodside and Dubelaar 2002) and the occasions of usage (Grace and O‘Cass 2003; deChernatony and Segal-Horn 2003). When the marketing of a destination is focusing on specific tourist segments, then the possibilities to success are increasing.

Segmenting and monitoring the tourist market is something really important and the tourism planners must seriously consider which tourist segments to attract. Not every tourist is interested in a particular destination (Tideswell and Faulkner 1999). A destination is usually wasting money when trying to attract all the segments of tourists. The definition of the target markets that the destination should approach is really important.

The most used classification so as to describe different visitor destination segments is based on whether the tourist travels with a group or independently. The terms that describe the above tourists are group inclusive tour (GIT) and independent traveler (IT).

2.2 Independent Traveler

The tourist segment that this paper is focusing on is of those travelers that perceive a destination as a sub-destination (or secondary destination). Hence, the tourists, who perceive destinations as sub-destinations, are the type of travelers that are being mentioned as independent travelers.

According to Cheong and Miller (2000) independent traveler is a person who travels by organizing the excursion by himself, rather than using a company who will arrange flights, hotels etc. Moreover, Hyde (2008) refers independent travelers as those vacationers who have booked only a minimum of their transportation and accommodation arrangements prior to departure on the vacation.

The aforementioned study of Kenneth (2008) suggests that independent travelers have three characteristics that are distinguishing them from the other travelers:

(1) The traveler experiences an evolving itinerary rather than a fixed itinerary, (2) the traveler is willing to take risks in their selection of vacation elements and, (3) the traveler possesses a desire to experience the unplanned.

In addition in the same study there are being described the conditions under which the experience of an independent traveler is likely to arise (Hyde 2008) (1) the vacation is a multi-destination vacation (2) forward bookings of accommodation and transport have not been made, (3) the traveler lacks familiarity with the destination and (4) the traveler perceives levels of risk to be low or irrelevant.

2.3 The Sub-destination

A sub-destination is being defined as a city, town or region in which the visitor stays overnight (Hyde 2008). For the needs of this research a sub-destination or second destination is a destination where the tourists are staying overnight or for a few days in comparison to the number of their total staying in the primary destination (Greece). According to Liu (1999) the term of the secondary destinations is referred tothe areas near to the primary destination. He finds that there is a difference of values and evaluations between the tourists who arrived at the airport of the primary destination and them who arrived at an international airport. During their stay, however, these values became “residual” and “touristic culture” dominated all aspects of their decision.A number of scholars have studied the movement patterns of tourists based on spatial characteristics. They identified inter-destination movement patterns pertaining to the nature of space, describing the occurrence of tourist activities in spatial-referenced location (Mings and McHugh 1992; Lue et al. 1993; Oppermann 1995; Flognfeldt 1999).

2.4 The Perception of Value in a Tourist Destination

The concept of Customer Valuehas not been clearly defined in literature. Iit has variously been described as complex (Lapierre 2000; PandžaBajs 2015), multi-faceted (Babin, Darden and Griffin 1994), dynamic (Parasuraman & Grewal 2000), and subjective (Zeithaml 1988). There are identified two major approaches of the perceived value conceptualization (Sánchez et al. 2006). Perceived value is treated as a uni-dimensional construct that can be measured simply by asking respondents to rate the value that they received in making their purchases. On the other hand, other authors have argued that perceived value is a multidimensional construct in which a variety of notions (such as perceived price, quality, benefits, and sacrifice) are all embedded (Holbrook 1994; Sweeney & Soutar 2001). The conceptualization of value is still under debate (Kotler et al. 2010). On the strength of foregoing debate, and taking into account reviews by Rihova et al. (2014) and Humphreys and Grayson (2008), the present study aligns with the view that dominates research, i.e. value should be treated as a multi-dimensional construct.

Creating and transmitting value to tourists nowadays is really important because the environment is characterized by globalised competition and tourists are more and more demanding (Flagestad and Hope 2001; Rihova et al. 2014). Recently, perceived value has been the object of research by researchers in tourism (Gallarza & Saura 2006). Perception is the process that an individual uses in order to select, organize, and interpret stimuli in a coherent way.

In general, in tourism that is a service industry, the experience of the consumer is intangible, dynamic and subjective. Therefore, the perception of value in a tourist product differs from the perception of value in tangible products. Services, in general, are perceived to be riskier than goods and tourism services, especially, have been considered as critical in tourists' perception of risk (Boksberger 2004).

In the tourism literature there is limited research on the perception of value of tourism experiences and destinations (with the exception of Tsogas, Zouni, and Kouremenos 2010; Petrick 2002; Sanchez et al. 2006; Chang 2008). The above researchers adopt the multi-dimensional scale in order to measure the perception of value from a tourist destination. Tsogas, Zouni, and Kouremenos (2010) developed a scale of measurement of the overall perceived value of a destination experience by identifying four dimensions: overall value, emotional value, functional value and social value. Petrick (2002) identified five dimensions by developing a measuring scale of perceived value for restaurants: quality, emotional response, monetary price, behavioral price and reputation.

In addition, Sanchez et al. (2006) identified six dimensions, in order to measure the perceived overall value of a travel agency purchase, that are the following: (1) Functional value of the travel agency (installations); (2) Functional value of the contact personnel of the travel agency (professionalism); (3) quality; (4) functional value price; (5) emotional value and (6) social value. Finally Chang (2008) answers how the service quality cues are related to the customer value from hotel services.

There is a dearth of literature combing the sub-destination with perceptions of value in a tourist destination according to various tourists' profiles.

3 Methodology

This research employed a self-administered questionnaire so as to capture the information from foreign tourists that visited Aegina. The questionnaires were distributed after tourists had completed their staying on Aegina so as to be able to evaluate their overall experience. The population of reference was international tourists of more than 15 years of age, visiting Aegina. The sampling procedure was non-random, with quotas for each tourist nationality, and stratified by age.

The gates of exit from the island were chosen so as to reach them (the port of Aegina, ships with destination back to Piraeus). In addition, questionnaires were placed at the reception of seven hotels in Aegina and tourists were asked to complete them during their departure day from the island. In total, 135 out of 250 questionnaires were received. The number of usable questionnaires was 122.

For measuring and correctly classifying tourists that have visit Aegina as a sub-destination, a number of factors were taken into account, additional to the number of days spent on the island. These were the total staying in Greece and the visit to other tourist destinations before or/and after visiting Aegina. Finally the tourists that perceive Aegina as a sub-destination are derived as an idiosyncratic sum of the following groups:

Same day visitors or 2 to 3 nights visitors with total staying in Greece more than 10 days, and 4 and more nights visitors with total staying in Greece more than 12 days - tourists for whom Aegina is the only tourist destination visited.

Furthermore the characteristics of those that perceive Aegina as a sub-destination were compared to the characteristics of those that perceive Aegina as a primary destination with the statistical methods of comparison of means (simple mean compare, T-Test) and chi-square test.

An application of Petrick's scale (2002) of perceived value of services and Tsogas, Zouni, and Kouremenos (2010) scale of customer value for tourism destination experience, and especially the theory of consumption value by Sheth and colleagues (1991), was used so as to measure the perception of value of those that perceive Aegina as a sub-destination. A scale of measurement of the perceived customer value of a destination experience developed through six dimensions. More specifically the overall value, the emotional value, the monetary price (functional value), behavioral price, reputation and social value were measured. The perceptions of the above six values by the secondary and the primary destination group of tourists respectively, were analyzed. The statistical method being used is one-way ANOVA.

4 Results

The percentage of the secondary destination tourists in Aegina was 58, 2% and the percentage of the primary destination tourists was the rest 41, 8% of the total sample.

4.1 Characteristics of Tourists that Perceive a Destination as a Sub-destination

The main characteristics of those that perceive Aegina as a sub-destination is that their mean total staying in Greece is 30 days whereas those that perceive Aegina as a primary destination have a mean total staying of 8 days.

The majority of the group that perceives Aegina as a secondary destination is of American nationality (24%) and the majority of the group that perceives Aegina as a primary destination is of English nationality (39%). In addition, tourists that prefer independent vacations rather than an all inclusive package are those that most of the times perceive Aegina as a sub-destination. Additional characteristics are that they travel alone, as couple or with their families, are between 19 and 49 and reported a middle income. This group of tourists, that don‘t want to organize a priori the destinations that they will visit and prefer to be spontaneous rather than buying tourist packages, is described in the bibliography as the independent traveler.

The factors that had influenced the decision of visiting Aegina were the same for the two groups with the exception of web sites and Internet that is a factor that has influenced significantly more the tourists that perceive Aegina as a primary tourist destination than the tourists that perceive Aegina as a second tourist destination ($p = 0, 15$), according to the findings.

On the other hand, according to the findings, the majority of those that travel as a part of an organized group perceive Aegina as a primary destination; their age is 50+ years old. The tourists that perceive Aegina as a primary destination have a higher income, they prefer the all-inclusive packages, and their main consideration is to relax.

4.2 Perceptions of Value of Tourists that Perceive a Destination as a Sub-destination

According to the findings the perception of the overall value, emotional value, behavioral price, reputation and social value between those that perceive Aegina as a primary and those that perceive the island as a secondary tourist destination is not statistically significant. Both groups of tourists have the same perception about the above values.

On the other hand, the above groups of tourists have different perception about the functional value of Aegina. Specifically, those that perceive Aegina as a primary destination perceives that Aegina has functional value and those that perceive Aegina as a secondary destination perceive the opposite. In order to understand why this value is perceived differently by those that perceive the island as a primary and those that perceive it as a secondary destination we must take under consideration the different characteristics of each group that were mentioned before.

5 Conclusion

5.1 Discussion

The objective of this paper was to investigate the main characteristics and perceptions of values of those that visit a sub-destination and the differences between them and those that perceive the same destination as a primary destination during their vacations.

It is suggested that in order to promote the island to the first target group, that is those that perceive the island as a sub-destination the promotional expenditure should be beneficial to concentrate at the local level in other sub-destinations, attractions of Greece. It is likely that the independent traveler will react positively to advice and referrals of Aegina when being in other sub-destinations, attractions and activities.

Furthermore, the promotion of Aegina through web pages and the Internet would be really beneficial since according to the findings this group of tourists is using the above factor so as to get informed for which places to visit. Moreover, since they are money sensitive (that is an indicator of their low perception of functional value) Aegina should be promoted to them as an economical solution.

Finally, the promotion of island in the group of tourists that perceive it as a primary destination should concentrate at different elements such as the relaxation and the safety (something that they seek because of their elder age).

5.2 Conclusions and Future Agenda

This research has uncovered two natural target markets, by trying to investigate the main characteristics and perceptions of values of those that perceive a destination during their vacations as a sub-destination. The promotion of a destination to its target group should be done differently and according to their special characteristics.

A research on the difficulties of turning a tourism destination that is perceived as a secondary destination from the majority of tourists, to a tourism destination that is perceived as a primary destination would be of great interest. In general, the marketing of tourism sub-destinations is a field that further research should be done. Greece has many sub-destinations and especially many islands that if marketed correctly to the foreign tourists the Greek economy would beneficiate a lot.

Future orientations for this research should focus on these and other directions to improve academic and professional knowledge around the complexity of attributing value to tourism market offerings on destinations.

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Chapter 18
The Semiotic History of Thermal Springs and Their Contribution to Tourism Development

Sofia Tsiftelidou and Anastasia-Charikleia Christodoulou

Abstract Tourism, the last decades, has shown a rapid growth in international level and this has created the necessity for diversification and enrichment of tourism products of each destination. Due to the resulting competition between tourism destinations, the tourist product should be strengthened and viewed respectively. Although tourism has been based from antiquity until today on spare time, nowadays presents a morphological evolution and an expanding outline of its species, one of which is the thermal spa tourism, as an alternative form of tourism. This study moves in the context of a socio-semiotic perspective regarding the history of the use of thermal spa in Greece from antiquity until today and their contribution to the current tourism development. The aim of this study is the emergence of the rich natural wealth in Greece regarding the number of thermal spa by the possibility of utilizing all sources with corresponding benefits to the economy, development and tourism. Historically, the thermal spa tourism, flourished as a remedy while today has diversified by expanding its use as a means of well-being resulting economic benefits. The research question raised from the fact that in Greece, due to the volcanic soil of many regions, there is an abundance of spa from which the largest percentage remains untapped by the state. According to data from the Institute of Geological and Mineral Exploration there are 822 sources of spa in Greece. Today from 752 sources, they are used the 348 (42%) in a large or small degree and officially recognized are 77 of them. The geographical distribution of spa is as follows: Central Greece 156, Thessaly 57, Epirus 56, Macedonia 115, Thrace 25, Peloponnese 114, Islands 229. Looking at the available statistics, everyone can realize the dynamic that tourism presents internationally, initially as an economic phenomenon, and secondly as a tourist attraction. The economic impact of tourism development is influenced by a variety of factors such as: (a) the type of facilities for the convenience of tourists and activities with the aim of attracting tourists, (b) the creation of a "consumption" to the guests for spending

S. Tsiftelidou (✉)
Department of Tourism, Region of Central Macedonia, Thessaloniki, Greece
e-mail: sofiatsiftelidou@hotmail.com

A.-C. Christodoulou
Aristotle University of Thessaloniki, Thessaloniki, Greece

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money, (c) the level of economic development of the host country. Given the above and the fact that the health is a determing factor in a society, the state should turn on strengthening these alternative structures and forms of tourism to the benefit of not only the individual but also of society as a whole. Something which should be answered is why the structures of thermal spa in Greece have not been sufficiently developed while they could be a means of promoting the country, but also of developing and covering part of the unemployment. Based on the current bibliography has been found that the sustainability of the thermal spa depends on requirements of the Ministry of Health and the existing legal framework as well as the Ministry of Tourism. It is deducted from the municipal enterprises the possibility of flexibility and adaptation to modern needs for healing and wellness. Apparently, as in modern society, as opposed to antiquity, in thermal tourism has incorporated the concept of profit, which hinders the purpose of thermal spa. It is proposed, therefore, the formulation of a proposal for a flexible institutional framework, in order to operate as many thermal spa as possible for the benefit of the individual and not only.

Keywords Semiotic history · Thermal spa · Tourism development

1 Introduction

The 20th century was the period when tourism gained great dynamism and spread to almost the entire planet. In particular, after the end of the Second World War, was transformed by a phenomenon that had a resonance only in the high social strata, to a mass phenomenon that covered much of society. This development has gradually led to the transformation of tourism into organized and mass tourism. This form of tourism includes a large number of tourists traveling for the main purpose of recreation and entertainment (Varvaressos 2008).

The causes that led to the rapid development of tourism and the international development of mass tourism have to do both for economic reasons and for social reasons. In particular, the technological developments in transport systems, the improvement of the economic situation of even larger masses, the development of travel culture, the availability of more leisure time and the development of social tourism were some of the main reasons for the rapid growth of tourism (Kokkosis and Tsartas 2001).

However, despite the rapid growth of mass tourism, this pattern of tourism development has had a severe negative impact on both the environment and society. At the end of the 20th century, and specifically in the early 1980s, mass tourism was subject to much controversy. Within this challenge, and as the international interest turned to the protection of the environment, a new model of tourism emerged, a sustainable tourism that relied on the development of alternative and mild forms of tourism. The emergence of the model of sustainable tourism development has been the last major historical development in the tourist phenomenon. Indeed, as many tourism researchers believe, sustainable tourism development and alternative forms of tourism will be the main component of the tourist phenomenon of the 21st century.

The phenomenon of tourism, as a complex and multidimensional phenomenon, has a positive and negative impact on a large number of areas at the economic, social and environmental level. Initially and in particular by the late 1970s, tourism surveys focused exclusively on exploring the economic consequences of tourism. However, through the questioning of the pattern of mass tourism, interest has turned beyond the economic impact on both social and, above all, environmental ones (Tsiftelidou 2012).

The economic effects of tourism are almost exclusively positive and concern a number of economic sectors such as employment, regional and local development, foreign exchange inflow, etc. In particular, tourism activities are labor-intensive activities, which creates many jobs and boosts self-employment. However, the seasonality of tourism makes seasonal and casual employment in the sector. More generally, however, because tourism has multiplier effects on the local economy, it strengthens the operations of many different sectors, thereby indirectly enhancing employment in these sectors (Kokkosis and Tsartas 2001).

Also, one of the major positive economic impacts of tourism is its contribution to regional and local development. As tourism can grow in remote, mountainous and generally disadvantaged areas, it assists these areas in creating a local productive base and restraining the local population. These characteristics are required for regional and local development and with the help of tourism development they are achieved (Andriotis 2005).

In addition, tourism has a very important contribution to the finances of a country. On the one hand, tourism enters the country with foreign exchange and so the balance of payments situation improves. On the other hand, tourist investment and tourist activities generate tax revenue for the state, both through value added tax and through the taxation of tourism enterprises (Apostolopoulos and Sardeli 2009).

At the social level, tourism has both positive and negative impacts. In particular, one of the most significant, essentially negative, social impacts of tourism is the change in the social structure of tourist destinations. Thus, as there are production structures based mainly on tourist activities in tourist areas, social structures similar to those of urban areas are shaped. In this way social relations change, as traditions, customs and traditions are abandoned and new standards and social behaviors are adopted (Coccosis and Tsartas 2001).

Extending the previous social impact is the gradual turning of the local population into the tourist professions. This has two dimensions: on the one hand high tourist incomes are distributed to a larger part of the population and, on the other hand, sectors such as agriculture, livestock, industry etc. are abandoned for the sake of tourism.

The most important positive social impact of tourism is the communication of the local population with the tourists and the positive results. Thus, since the contact between local people and tourists influences both social groups, on the one hand, values and principles of local society are exported to young people, while the social behavior of the local population is enriched with new modern ideas (Andriotis 2005).

Finally, underdevelopment of tourism activities leads to the systematic promotion of local culture and its use as a tourist resource. This may lead to the gradual transformation of local culture into a commercial tourist product and consequently to the degeneration and alteration of the characteristics of local tradition and culture.

The environmental impacts of tourism are multifaceted and essentially negative. In fact, the relationship between tourism and the environment is particularly contradictory, since on the one hand tourism exploits the natural environment as a tourist attraction while at the same time it is burdened with the massive and organized development of its activities (Coccosis and Tsartas 2001).

In particular, a very significant negative impact of tourism on the environment is the influence on the balance of the natural environment. The effect on this balance is either by expanding tourist activities in the countryside or by large-scale tourism interventions. The disturbance of the natural environment from tourist activities has been the main axis of criticism of mass tourism (Andriotis 2005).

Also, the uncontrolled development of tourism creates significant land-use conflict problems. Such phenomena, occurring mainly in rural and coastal areas, generally degrade the environment and the quality of life of the inhabitants in these areas. Indeed, this problem is not easily addressed as tourism increasingly demands space for its activities and infrastructure.

Still a very significant impact of tourism on the environment is the conversion of remarkable residential complexes or sections into tourism resources. Such sets and sections are considered to be traditional settlements, lakes, biotopes, etc., which are environmentally and culturally sensitive, and therefore have no burden of strain. Thus, the development of tourism in such sets, many times if not done in the right way, endangers the whole itself (Coccosis and Tsartas 2001).

Finally, each tourist area has a bearing capacity, which refers to the region's potential to absorb a certain amount of infrastructure and tourists. Thus, if we overcome the capacity of a destination, we have serious disturbances in the environment (Apostolopoulos and Srali 2009). Within the framework of the sustainable tourism development model, which is still gaining ground, as well as the trend of enriching the tourist product and the extension of the tourist season, various alternative forms of tourism have gradually begun to develop. These forms of tourism go beyond traditional tourism. In addition, alternative forms of tourism are also being developed in areas where there are no classic tourist resources attracting tourists. Thus, it could be said that alternative forms of tourism can be developed even in non-tourist destinations (Venetsanopoulou 2006).

In recent years both different types of alternative tourism have been developed in Greece and internationally. The main ones are health tourism, agrotourism, ecotourism, mountain tourism, cultural tourism, religious tourism, professional tourism, marine tourism, etc. (Andriotis 2008; Coccosis et al. 2011).

An alternative form with a long history is health tourism, which has appeared since antiquity. Particularly in this form of tourism, the main motivation is health in the broad sense, namely the treatment of diseases, the revitalization and the improvement of human health. As perceived, health tourism includes many tourist activities and is manifested in many aspects such as healing tourism or healing (thermal springs), combination of tourism with special therapies, hygiene and natural tourism, and tourism for disabled people (Venetsanopoulou 2006).

It is important to clarify that medical tourism and healing tourism are two different things, despite the fact that both are aimed at restoring health. The existence of healing tourism is a prerequisite for the availability of thermal springs. According to the existing literature, there is a relative confusion about the terms "health tourism", "medical tourism", "spa tourism", "healing", "healing tourism", "wellness tourism". The use of terms acquires different conceptual content depending on the subject's scientific scope.

The term medical tourism, on the other hand, according to a study by the World Tourism Organization, refers to tourists who choose to travel internationally to receive some form of medical treatment. Therapies can cover a full range of medical services, with the most common: dental care, plastic surgery, selective surgery, and fertility treatments. The term "health tourism" was used for the first time in 1973 by the Association of Tourism Organizations (IUTO) and is referred to as "the provision of health services using a country's natural resources, in particular mineral water and climate".

The methodology of this research is bibliographic without looking at models and specific spas in Greece. The way the bibliography is examined is done through a semiotic perspective but not systematic, i.e. it studies the relationship between the thermal baths and the factors of their utilization (Lagopoulos and Baklund 2016).

2 The Thermal Springs and Their Use From Ancient to Today

In Greece, the term "thermal tourism" refers to the form of tourism that develops on the basis of the natural resource of thermal healing springs as well as the movement of people and their stay in corresponding areas where healing and healing structures and services are offered. In the international literature the term is referred to as the term "health and wellness" or "Thermal Spa" (Papageorgiou 2016).

Thermal tourism is an alternative form of tourism that belongs to the category of social tourism and includes activities related to mental and physical health and improving the well-being of visitors. The use of thermal waters dates back to antiquity, with Herodotus first observing (484–410 BC), who reported and recommended bathing while Hippocrates (460–375 BC) determined the diseases for which he recommended to use the thermal springs and to treat the thermal hydrotherapy (Boleti 2006). Other philosophers like Aristotle, Strabo, Plutarch, Xenophon are also making references to the use of thermal baths. At the same time, the known Asclepieas are established as the first centers of health around the hot springs and operate outside places of worship as centers of healing and health recovery. In Roman times, the use of baths is a compulsory social process, that is, they are places of spiritual, mental and physical exaltation, but also cultural and socio-economic reference points. From the Middle Ages and after the healing baths, they are questioned about their healing action, which is partly overturned during the period of the Byzantine Empire while during the Ottoman domination a rise of Turkish baths is seen as a place of cleanliness, relaxation and socio-political meetings.

The evolution of thermal springs in recent years leads to a series of changes in their use. With the establishment of the new Greek state, the government is proceeding with a reconstruction of the infrastructure of the thermal springs and in the mid-1980s it becomes a pole of attraction for public investment, large transport projects and a shift of interest through international campaigns. Since 1990 there has been a shift to the fullest use of thermal baths, which, however, due to the financial crisis in Greece, the healing centers are in recession.

In Europe, healing tourism has spread and widened over the last four centuries, while the constant evolution of Europe's thermal springs began in the nineteenth century. At the beginning of the 20th century, the use of spa baths developed into leisure and entertainment centers with recreational activities with increasing growth rates (Gilbert and Weerdt 1991: 5; Cockerell 1996). In northern Europe, health tourism products are of a very high standard in terms of both social and medical. In Italy there are about 200 health tourism centers, 100 health centers are operating in Austria, of which 20 are exclusively for hydrotherapy. Austria is presented internationally as a rejuvenation destination and together with Switzerland are unique resorts specialized in climatotherapy. The climate combined with the altitude of the location is ideal for recovery and relaxation. Spa centers also operate in Spain, France, Portugal and Belgium. In North America health tourism has the concept of relaxation rather than treatment being provided mainly by private companies located in luxury hotels. Finally, healing tourism in Russia is considered an expanded area since one in fifteen Russians visit them. It should also be stressed that health tourism products are a good health protection as they contribute significantly to preventive medicine.

The question that arises from the above with regard to Greece is, if finally with all the difficulties due to the economic crisis, the thermal springs can be a pole of attraction for tourists aiming at the rise of the economy. Greece is rich in thermal springs and is suitable for application to modern natural hydrotherapy. The point is that in all the hot springs in Greece there is only the form of treatment and not the provision of services related to the revitalization of the organization, that is, the centers we meet in Greece are more centers of healing tourism rather than health tourism centers. Health tourism is not a new form of tourism but in modern times it is part of the tourism industry with a very large number of growth. Based on the EKKE (2016) survey, unfortunately the movement in the thermal baths has been steadily declining since 2012.

Examining the available statistics, the international tourism potential, initially as an economic phenomenon, and the attraction of tourists, is ascertained. The magnitude of the economic impacts of tourism development is influenced by a number of factors that do not exploit the thermal springs and which, with the appropriate infrastructure, could contribute to the economy.

3 The Contribution Factors of the Thermal Springs in the Economy

3.1 Legal Framework of Thermal Springs

Natural healing resources are owned by the Hellenic Tourism Organization (EOT) regardless of the ownership of the land on which they appear, are pumped or exploited in any way, unless they are located in communal seaside and beach areas owned by the State, while use and exploitation belongs to the GNTO. There are no private property rights over recognized thermal springs that existed on 1.1.1920 according to article 2 of Law 2188/1920. In the event of the EOT being dissolved or the abolition of its public character, the ownership of natural healing resources is transferred to the State. At the GNTO a General Register of Thermal Natural Resources is kept, which records the recognition decisions with the supporting documents accompanying them. The management of thermal natural resources also belongs to the GNTO. The procedure and conditions for the assignment of management of natural resources to third parties are determined by decision of the Minister of Tourism. The Greek National Tourism Organization (EOT) has the possibility of granting the exploitation to third parties through a public tender. It also has the responsibility to protect the quality, quantity and physical, chemical and biological characteristics of natural healing resources. Recognition of natural resources as a medicinal product is avoided in the following cases: (a) when the natural, chemical, biological or other qualitative characteristics of the natural resource change, leading to the disappearance of its recognized healing properties; (b) when due to pollution of the aquifers or the area in which springs from or derives from the medicinal natural resource, the healing properties disappear or the characteristics of the natural natural resource are altered or public health is no longer guaranteed.

Today, the main institutional interventions of the Ministry of Tourism include:

The Legislative Initiative for the Declassification of Thermal Waters in the past, were legally treated as waste and sewage and created a regime that prevented investment and the identification of their beneficial properties by enabling the recognition and licensing of thermal tourism facilities.

Activating and setting up the Ministry of Tourism of the Committee for the Protection of Thermal Natural Resources, which is rapidly developing the recognition of thermal springs.

The adoption by ministerial decisions of modern operating standards for the erection, conversion and extension of the thermal treatment units, spa-healing and thalassotherapy centers, and the Special Functional Procedure.

Together with the co-responsible Ministries, a multidisciplinary working group on criteria and specifications for the distribution of the water of the thermal resource and on the overall framework through which the exploitation and utilization of the thermal springs will be exploited.

The completion of the institutional framework for the distribution of natural healing resources and geothermal fields in the country.

The possibility of investment utilization of the thermal springs, through existing and new financing programs. In recent years, spas have been a central theme of the debate on the possibility of investing, in general, in health tourism and in particular in thermal tourism.

The current legislation known as the “Petralia law”, on which all the healing tourism is based, remains rudimentary. For example, of the 120 natural resources filed to be recognized by the Ministry of Tourism as healing, 46 have been recognized and 74 are missing (January 2018). In order to complete the process, there are pending legislation on the technical specifications of the treatment unit to give the permits, but also the presidential decrees defining the protection zones so that each investor can know exactly where to invest.

Today, by decision of the Minister of Tourism Elena Kountoura, published in the Official Gazette, the technical and operational specifications for the erection, conversion and extension of the Thermal Treatment Units and Thermal Spa Centers and the procedure for the granting of a Special Functional Symbol were determined. This decision paves the way for new investments on the basis of a modern and integrated framework for the development of thermal tourism in Greece, which has been a priority in the implementation of national tourism policy, the development of new thematic tourism products and the strengthening of the competitiveness of Greek tourism.

The publication of the decision follows the Joint Ministerial Decision of the Ministers for Tourism, Finance and Administrative Reconstruction, which established the corresponding specifications for the Thalassotherapy Centers and was recently published by the FMC. These requirements apply either to establishments established independently or in combination with a hotel unit. The decision foresees the inclusion from today of the process of awarding the Special Mark to the handling system through the Citizens Service Centers (KEPs) that operate as a Single Service Center (CSR). The decision was published in the Official Gazette (Issue B ‘603/22.02.2018).

3.2 Seasonality

Therapeutic tourism is a selective form of tourism with significant economic advantages. It is the form of tourism that suffers the least negative impact from any adverse circumstances and can give a 12-month tourist season. However, due to inadequate funding for local bodies and insufficient cover by insurers, it is true that the number of visits to thermal baths is very low. This has the effect of restricting the tourist season throughout the year. Thus during the winter season many spas remain closed due to the high maintenance costs (Kouskoukis 2013).

3.3 Medical Coverage

Another weakness in the development of thermal baths is the position of medical science towards the thermal baths, as many doctors do not recognize their healing properties and give weight to medication. At the same time, healing tourism could not be directed only to healing but also to prevention. Due to the chemical properties of the metallic elements whose therapeutics are based on empirical research, it should lead medicine to turn to scientific studies of the thermal engineering and chemical action of the thermal springs, which will show it as a complementary therapy treatment.

3.4 The Non-promotion of Thermal Springs

An important role in the downward course of healing tourism has also been the lack of their relative visibility through information from either television, radio, newspaper, magazines both internally and abroad. It has been observed in recent years at the international level that the wellness area offers the visibility and diffusion of information all over the world with bilingual texts (English, French, Italian etc.) that love the healing tourism as well as visibility of the therapeutic properties per illness. In order to spread the spa baths abroad, which are a world-recognized treatment method, there should be increased funding by the state authorities for local actors to participate in foreign exhibitions and conferences. Another advantage that Greece could make use of are also parallel, correlated actions such as the promotion of local products, natural and archaeological wealth, world-class landscapes, which attract tourists.

3.5 The Non-qualitative Development of the Facilities

Obviously the main reasons for the visit to the thermal baths are therapeutic and at the same time entertaining. Hence the benefits and the configuration of the space should meet the above reasons not only in quantitative but also qualitative terms. That is to say, a "consumer" tendency should be created for visitors with financial benefit to the local community. These holiday packages should also be combined with other recreational, rejuvenation, sports (such as skiing, sailing, horseback riding, tennis, etc.) and cultural activities of high social life (such as cinema, theater, music festivals, etc.) because they appeal not only to patients but also to patients' escorts, as well as other visitors, usually of higher income level. In addition, long-term stay in these resorts, larger than usual tourist resorts, is required to show the effects of a particular treatment, especially if they are specific treatments (such as anti-tobacco therapy, anxiety, psychotherapy,, relaxation, dietary, sleep learning, research of the correct line-posture, aesthetics, etc).

4 Conclusions

4.1 Suggestions for the Sustainability of Thermal Springs

Greece's major growth prospects, as a global attractive investment destination for health tourism, were reported by the Secretary General of Tourism Policy and Development, Giorgos Tzillas, in a speech at the 2nd International Conference on Health Tourism held in Kos (23–24 June) under the aegis of the Ministry of Tourism and the Medical Association of Athens. Gialylas stressed in his speech that thematic tourism and especially health tourism is a privileged area for investment in Greece as there is great mobility from foreign investors who are either looking for specific opportunities in this area or are in an advanced stage of contact with implementation of their investment plans. Referring to the new institutional framework, which was initiated by Tourism Minister Elena Kountoura, which allowed the recognition of dozens of spas on Greece and the development of new ones, it announced that 53 thermal springs have already been recognized with the signature of the Minister of Tourism, licensing process. It also presented the new institutional framework for the development of the thematic products of Greek tourism, which immediately completes the public consultation and the health tourism is a basic axis of development. It also announced that new financial instruments have been provided through a NSRF program that will enable municipalities to use their healing resources.

4.2 Contribution to Tourism Development

Initially, it should be noted that the rapid growth of the tourist phenomenon worldwide and the widening of tourist destinations increased competition between them. Thus, in order to strengthen the role of tourist destinations in this competitive environment, each destination sought to enrich its tourist product. This has been done in a number of ways, one of which is to strengthen health tourism.

Health tourism in modern society is part of the so-called tourism industry in the world with many economic benefits in a highly competitive environment. Greece's competitive characteristics for the development of health tourism are the climate and natural resources, the Mediterranean diet, the huge potential in tourist accommodation and the specialized staff. Certain inhibitors of health tourism based on the above analysis are the poor quality of infrastructure, poor health services, logistical equipment and legal deficiencies.

As we have seen above, the benefits of healing tourism are mostly for tourism development. The rational use of natural healing resources is proposed in order to ensure optimal integration into the tourist geography of a country. This means that the thermal springs should be connected with a visit and sightseeing of the area as well as with their emergence. It is therefore proposed that funding be provided by the insurance institution for all social and age groups.

In conclusion, investing in health tourism could have many economic benefits for Greece as it can be developed all year round as an alternative form of medical and therapeutic tourism as long as it is effectively integrated into the country's tourism policy and development strategy. By stimulating this economic activity, new jobs will be created, a greater inflow of currency, improved transport services, and high-level facilities. Greece in the sphere of thermal springs could be a "model" for all the Mediterranean cities.

The question remains open without a meaningful answer given, because while the necessary funding is available, as well as the foreign investors, the Greek state for some reason is unable to absorb the specific funds. If we want to interpret it semiotically, this means that the appropriate actions should be taken so that the state can translate this negative image into positive with the corresponding benefits for healing tourism.

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Chapter 19
Unveiling the Profile of Tourists in Islands with Protected Areas to Promote Sustainable Tourism

Aristotelis Martinis, Katerina Kabassi, Georgios Karris and Charicleia Minotou

Abstract This research aims to understand the profile and the type of tourists that visit islands with protected areas such as national parks or Natura 2000 areas. For this reason a study was implemented in Zakynthos Island during the summer 2013. The questionnaire-based survey involved 2981 participants and the results revealed the tourists' profile, their social-demographic characteristics, their environmental awareness and the degree of their recreational satisfaction. The results of this survey could help local authorities to understand the perceptions of tourists. Visitors' profile and preferences analysis is crucial for the compilation of a strategic plan, as well as for the implementation of an adapted environmental policy. The design of a model for the sustainable development of the island by integrating the environment and the awareness of tourists and of the local communities would be the next goal.

Keywords Public awareness · Eco-tourism · Experimental studies · Ionian sea

JEL Classification O20

1 Introduction

Tourism is an important sector of the global economy and the number of international visitors' arrivals, worldwide increases every year. In Greece, tourism is one of the main pillar of the economy and the number of tourists is increases year by year, (e.g. from 25 million in 2015 to 26 million in 2016 and over 28 million for 2017). Unfortunately, many reports that refer to the tourism of Greek islands conclude that the conventional touristic model, based on sun, sea and sand, has been inadequate towards guaranteeing sustainability as the economic benefits are limited (Avdimiotis 2009; Wadih 2005). Most of the tourism activity is gathering in

A. Martinis (✉) · K. Kabassi · G. Karris · C. Minotou
Department of Environment, Ionian University, Zakynthos, Greece
e-mail: aristotelismartinis@yahoo.gr

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the coastal and insular regions where the most significant negative impacts on the natural environment are observed. The problem is getting bigger due to the seasonality of tourism and its spatial distribution.

Indeed, as Grossberg et al. (2003) point out, conservationists are missing opportunities to protect species at mass tourism hot spots where the wildlife itself doesn't constitute the main tourist attraction. In such locations, it is interesting to explore the interest of 'incidental ecotourists'. Therefore, what is really important, is promoting the natural and cultural particularities of each region (environmental interpretation, information, environmental education, protection of habitats and species), so that tourists not only declare their support for environmental protection measures but also make a substantial contribution to this (Ballantyne et al., 2009; Budeanu, 2007).

In the past decades, many studies have been carried out, exploring the profile, attitudes, perceptions and behavior of tourists (Trakolis, 2001; Pavlikakis & Tsihrintzis 2003; Rao et al., 2003; Machairas & Hovardas, 2005 Petrosillo et al., 2007; Ogunbode & Arnold, 2012; Sdrali et al., 2014). Most of the studies investigate the recreation and preferences of visitors, the attractiveness of the area (Cheng et al., 2013) and the environmental behavior of visitors (Ballantyne & Packer, 2011). In this research, we present a study on the profile of tourists in Zakynthos Island in the Ionian Sea, which hosts a National Marine Park and three different Natura 2000 sites, and try to examine the role of these areas in choosing the particular island as destination for vacations.

Lately, there has been a sharp shift of visitors to the protected areas where, despite the limitations on environmental protection, the number of visitors is constantly increasing. When an area is established as protected, the local community has to change its behavior, respecting the natural resources and the ecosystems that nowadays may be used over their capacity because of the increase of the visitors (Brandon et al., 2005). This is the case of Zakynthos Island, since the local authorities and tourism agencies follow a mass touristic model even if the National Marine Park of Zakynthos (NMPZ) was established in 1999 by a Presidential Decree. The attitudes of residents and their interactions with the protected area, as well as the level of local participation and possible conflicts, constitute important issues that relate to the effectiveness of the management and protection of an area (Pimber & Pretty, 1997). Nowadays the tourism industry in the area of the NMPZ is highly developed and tourists that are interested in the sea-sun-sand tourism experience have to coexist with eco-tourists. The respect of the environment of tourists' destination is nowadays considered as a fundamental factor for a successful coexistence of these two different touristic models and at the same time constitutes a priority for the local society.

Zakynthos Island, over the last few decades, has seen an impressive increase in tourism, resulting in severe environmental degradation. At the same time, it is the major nesting area of the Loggerhead Sea Turtle (*Caretta caretta)* (Lagana bay), hosts important habitats for the Monk Seal (*Monachus monachus)*, is one of the most significant corridors for bird migration during the spring and autumn periods and hosts many endemic species.

The present study aimed at:

a) exploring the knowledge and opinion of the visitors about the island of Zakynthos and the NMPZ;

b) map and evaluate if the environment has an impact on the choice of tourists to select Zakynthos as a recreational destination;

c) assessing the degree of satisfaction and the willingness of visitors to come to Zakynthos again;

d) clarify whether the profile of the visitors is linked to environmental awareness and their understanding and sensitivity for the environment and its protection.

In addition, this paper seeks to inform and furthermore, broaden the debate on sustainable development while contributing to the implementation of policies that will lead to the gradual change of the image of the island as an environmental destination. The re-determination of the touristic model has already started, as an existing gap on promoting the unique environment of the island in the promotional touristic actions from the authorities and the local society drove to lose many upcoming challenges and opportunities.

2 Methodology

Study Area

Zakynthos is located in the Ionian Sea, between Greece and Italy. The island covers an area of 406 km^2 and has a population of about 42,000 people. The National Marine Park of Zakynthos (NMPZ) includes the Gulf of Laganas and the Strofades islands, which means terrestrial, coastal and marine ecosystems. The NMPZ has been established in 1999 and the tourism industry is its biggest challenge for the protected area (Togridou et al. 2006). Moreover, the NMPZ constitutes an important nesting habitat for significant marine animal species of international conservation value such as the Loggerhead sea turtle (Mazaris et al., 2006; Kokkali & Edwards, 2011) and Scopoli's Shearwater (Karris et al., 2017), a pelagic seabird. A new legislative frame at April 2018 expanded the boundaries of the NMPZ at the West Coast of Zakynthos, Natura 2000 area, which has been recorded as important habitat for the Monk Seal.

Moreover, Zakynthos provide opportunities for eco-touristic development at its mountainous area of the island where a visitor can see significant natural and cultural heritage zones and a landscape with a unique combination of mountains and steep-cliff coastal areas (Map 1).

Data collection

The study was conducted in Zakynthos Island and a total number of 2981 tourists responded to a questionnaire-based survey. More specifically, the questionnaire included 19 questions, divided into 3 sections. The first section contained 5 questions and addressed targets' personal characteristics, such as Age, Nationality, Sex and Educational level. The second section contained 8 questions about

Fig. 1 The island of Zakynthos (source: Spatial Analysis lab, TEI of Ionian Islands)

the environmental knowledge of the tourist being interviewed and the third section investigated the visitors' satisfaction, their willingness in proposing this Island as destination to other tourists and their willingness to pay a fee for the protection of the NMPZ.

The target population included locals as well as Greek and foreign tourists. The questionnaires were distributed during the high tourist season, from July to September 2013.

The completion of the questionnaires took place in two crowded beaches within the NMPZ and in an information kiosk place in a central and crowed location of the city of Zakynthos. Interviews took place between 12:00 and 16:00 in the beaches, as the researchers estimated that this option cover the peak hours (working and weekends), and 19:00-23:00 in the info kiosk as during evening many people visit the city.

Questionnaires were shared to everyone over 16 years old and the completion did not exceed 8 min. In total, 1260 questionnaires were collected in the beaches and 1721 questionnaires were gathered in the kiosk.

3 Results

Visitors' profile

The analysis of the 2981 questionnaires showed that women surpass men (53.3% female, 46.7% male). The respondents' ages are between 16 and 75 years of age,

Table 1 Visitors' profile in terms of gender, age, education level and nationality (n = 2.981)

Socio-economic visitors' profile		
Variables		
Gender	Num.	%
Male	1394	46.7
Female	1587	53.3
TOTAL	2981	100
Age		
<30	1078	36.2
31-45	933	31.3
46-60	698	23.4
>61	272	9.1
TOTAL	2981	100
Education level		
Primary school	398	13.3
Second. school	1030	34.5
University/TEI	1310	44
Post-graduate	243	8.1
TOTAL	2981	100
Nationality		
Balcans	118	4
Central Europe	1008	34
Nordic	30	1
North Amer.	48	2
Greece	1777	59
TOTAL	2981	100.0

the highest rates (36.2%) are recorded in the first age group (< 30 years), while the lowest (9.2%) in the age group > 61 years (Table 1). Regarding the country of residence, the Greeks participating (59%), followed by the Central European countries (34%), the Balkan countries (4%) and the Americas and Northern Europe (2% and 1% respectively). In a similar survey in the Azores islands (Queiroz et al., 2014), North European visitors (39%) occupy the first position, followed by Central European countries, while visitors to the Iberian Peninsula do not exceed 15%. It should be noted that the current survey does not include the tourists of the island's largest 5-star hotels, which mostly use hotel infrastructure and only a few go to the NMPZ's beaches. Visitors' level of education is high, with 52% of respondents holding University or postgraduate degrees. Regarding the number of tourists who visited Zakynthos, 78% visited the island for the first time, while 22% of the responders revisited the island for the second time or more.

The majority of respondents (73,5%) estimate that the Ionian Sea and the Island of Zakynthos present environmental interest for the visitors. Only 12.2% of the respondents were negative and 14% of the respondents said that did not have enough information of the subject. What was really sad was the fact that only a small percentage (19%) of the respondents stated that the existence of the NMPZ played an important role in the choice of the tourist destination. Additionally, only 40% of the respondents knew that Zakynthos is one of the most important migratory corridors in the Mediterranean, while the knowledge of visitors about the local fauna and protected species of the NMPZ was also quite limited. Visitors only know the *Caretta Caretta* turtle (65%), while 34% know the common species Yellow-legged Gull, 31.5% Audouin's Gull, 19% Mediterranean Shag, and Cory's Shearwater species and Puffinus yelkouan (10% and 9%, respectively).

The above data are in line with the answers we received about the lack of informative material and procedures within the Park. The majority (80%) believe that information in the NMPZ area is inadequate and the information material is completely missing.

Visitors' satisfaction

Concerning the satisfaction of visitors from recreational activities (Table 2), 60% of the responders were very satisfied. Only 18.3% of the respondents were not satisfied. Special interest is presented in the analysis of the answers to the question that asked whether they will visit the island again. 43% of the respondents replied negatively, 49% of respondents said they would resume the visit, while 7.7% said they would definitely be back in the future.

Another question involved the satisfaction of tourists regarding the behavior of the inhabitants of the island. Only about half (58%) say they are very satisfied, while 42% of the sample said they were not really satisfied. The visitor's appreciation was also moderate considering the cleanliness on the island. Only 43% considered the island clean, 23.5% of the respondents think cleanliness is very poor, and 33.5% believe that the solid waste management system needs further improvement.

Regarding the major threats to the biodiversity of the Park, 78% of respondents linked threats to pollution. Other threats that the responders identified as important

Table 2 The frequencies of alternative answers to the questions relating to tourists' satisfaction of being in a National Marine Park and visiting the Island of Zakynthos, satisfaction of local behavior and willingness to come back to Zakynthos

Questions	Greatly/Yes		Partly/ Mayby		No		Total	
	Num	%	Num	%	Num	%	Num	%
1. Park as destination	563	18.9	1265	42.4	1153	38.7	2981	100
2. Satisfaction of the recreational experience	1790	60	646	21.7	545	18.3	2981	100
3. Willing to come back to Zakynthos MPA next year	1469	49.3	231	7.7	1281	43	2981	100
4. Would you suggest Zakynthos as destination	1413	47.4	328	11	1240	41.6	2981	100
5. Cleanness in the Island	1281	43	998	33.5	702	23.5	2981	100
6. Local behavior	1724	57.8	957	32.1	300	10.1	2981	100

were overfishing and tourism pressure, 37% and 34%, respectively. 55% of respondents believe that environmental Non Governmental, (eNGOs), can offer an effective contribution to environmental protection, while in the question “how to inform visitors and promote protection messages”, it is more effective to use modern technologies (internet, TV, spots) with activities of environmental education, volunteering and with the participation of local communities. Although a significant percentage of the respondents (46%) would have proposed Zakynthos as a destination. Instead, the overwhelming majority (91%) would like to contribute financially to the protection of the Park, while almost the same percentages would accept without protest further restrictions within the park to protect the natural wealth.

Statistical analysis
The test for the internal consistency Reliability was done using SPSS software and showed satisfactory reliability of responses (Cronbach’s Alpha Coefficient > 0.7). The chi-square association test applied to qualitative variables (environmental knowledge, and visitors’ satisfaction) and each of the social-demographic characteristics variables (age, gender, education level and nationality) showed statistically significant differences ($p < 0.001$), except the variable sex, where the answers don’t present significant differences ($p > 0.001$) (Table 3).

The correlation between the different education levels of the sample, with answers to environmental knowledge and satisfaction of visitors, shows statistically significant differences ($p < 0.001$). The higher the level of education, the higher the level of the positive answers to the question whether they would propose Zakynthos

Table 3 Chi-square test applied to variables (responses) concerning “Environmental opinion and satisfaction” and each of “Sociodemographic characteristics”

Environmental opinion and satisfaction	Sociodemographic characteristics			
	Age	Gender	Nationality	Educ. lev.
	p	*p*	*p*	*p*
Zakynthos present environmental interest	0.000	0.515	0.000	0.000
Contribution of Marine Park to the selection of destination	0.000	0.312	0.000	0.000
Satisfaction of the recreational experience	0.000	0.000	0.000	0.000
Are you satisfied with the behavior of locals?	0.000	0.086	0.000	0.008
Are you satisfied with the clearance of the area?	0.000	0.010	0.000	0.000
Willing to come back to Zakynthos MPA next year	0.000	0.010	0.000	0.000
Willing to pay for benefiting recreational use of MPA	0.000	0.664	0.000	0.031
Would you suggest Zakynthos as destination to other tourists?	0.000	0.157	0.000	0.000
Is the Ionian Sea an important corridor of migratory birds?	0.579	0.623	0.681	0.001

as a tourist destination to friends or acquaintances. There are no significant differences between levels of education in the question of the degree of satisfaction considering the behavior of the local community ($p < 0.001$). 56% said they were satisfied, 30% had to improve behavior, while 10% of the sample described the behavior as unacceptable. Also, regardless the education level, all respondents intend to pay a fee between € 20 and € 30, to improve the protection of the Park ($p = 0.31$).

Chi-square control test among age groups showed very significant statistical differences ($p < 0.001$). The vast majority of young people < 30 years old (77.2%) find the island very interesting from an environmental point of view, while this percentage at ages >60 is 62%. Greater differences between the ages are seen in the question of their satisfaction with staying and recreational activities. 75% of the young people aged < 30, said they are completely satisfied, unlike the age group >60, where the corresponding percentage is limited to 37% (Table 4).

Particularly strong is the dissatisfaction of the older ages to the question whether they will visit the island again. 62% of young people give positive responses, while positive responses by visitors >60 years old correspond only to 3.4%. Similar are the answers to the question if they find the island clean (Table 5). Young people respond positively to 66.5%, while only 3.4% of the older adults gave a positive answer. Finally, in order to explore the intention of tourists in contributing to the protection of the NMPZ, interviewees were asked about their willingness to pay for the Park. The analysis showed statistically insignificant differences ($p > 0.001$). The vast majority of visitors (92%) declared the willingness to contribute to the protection of the NMPZ. The only differentiation was in the fee the respondents were willing to pay.

Table 4 The answers of the sample by age class and level education to the questions “Satisfaction of the recreational experience” and “Willing to come back to Zakynthos MPA next year”

Questions	Satisfaction of the recreational exprerience				Willing to come back to Zakynthos MPA next year			
	Greatly	Partly	Not at all	Total	Yes	Maybe	No	Total
Age	%	%	%	%	%	%	%	%
<30	74.8	12.1	13.1	100	62.1	8.2	29.7	100
31-45	61.7	17.2	21.1	100	62.7	7.8	29.5	100
46-60	41.7	28.2	30.1	100	21.7	6.5	71.8	100
>61	37.9	9.9	52.2	100	3.7	40.1	56.2	100
Education level								
Primary sch	52	16.1	31.9	100	37.7	16.1	44.2	100
Second. Sch	55.5	21.8	22.7	100	46.2	12.1	41.7	100
Univ/TEI	60.1	21.2	18.7	100	54.1	21.2	24.7	100
Post-grad	62.1	25.6	12.3	100	62.1	25.6	12.3	100

4 Discussion

This research was primarily designed to explore visitors' opinions and satisfaction from visiting an island rich in biodiversity and three important protected areas (Natura 2000). Tourism development in the Ionian Islands is based on the combination of a good environment and the beauty of its natural resources and landscapes. In our case, the study revealed that biodiversity, protected areas and the natural beauty attract relatively few visitors to the island of Zakynthos. This is not the case of other Ionian islands. For example, the majority of tourists that are visiting the Paxoi Islands, located further to the north of the Ionian Sea, mainly to relax and gaze at beautiful landscapes (Kafyri et al., 2012).

The questionnaire-based experimental study participated 2981 tourists and their profile was analyzed. The women were slightly higher (53.3% of women to 46.7% of men). Women are slightly more in several similar studies. For example, in the study in the Azores protected area, the female tourists were 56.2% female (Queiroz et al., 2014), in Lamanai Archaeological Reserve the women cover the 52% of the sample (Grossberg et al., 2003), and in Ras Mohammed National Park at Sharm El Sheikh in Egypt, the female tourists are 52.8% of all tourists (Leujak & Ormond, 2007). Taking into account the research findings that there are no differences in the responses between men and women, we can conclude that both sexes have the same concerns about looking for destinations with a natural environment (Queiroz et al., 2014).

Looking at trends in nature and alternative tourism, our research indicates that part of visitors is interested for the natural environment and the protected areas and their interest increases with an increasing educational level. In fact, the educational level of the tourists surveyed, was mostly high. This may be correlated with the fact

Table 5 The answers of the sample by age class and level education to the questions "Are you satisfied with the clearance of the area" and "Are you satisfied with the behavior of locals"

	Question: Are you satisfied with the clearance of the area?				Question: Are you satisfied with the behavior of locals?			
	Greatly	Partly	Not at all	Total	Greatly	Partly	Not at all	Total
Age	%	%	%	%	%	%	%	%
<30	66.5	19.4	14.1	100	56.4	30.7	12.9	100
31-45	44.6	38.3	17.1	100	58	31.7	10.3	100
46-60	17.3	47.9	34.8	100	58.4	31.4	10.2	100
>61	4	36.4	59.6	100	56.1	37.6	6.3	100
Education level								
Primary sch	36.4	31.9	31.7	100	56.4	30.7	12.9	100
Second sch	40.9	34.7	24.4	100	57	32.9	10.1	100
Univ/TEI	43.5	34.7	21.8	100	58.4	31.4	10.2	100
Post-grad	44.7	35.7	19.6	100	56.1	37.6	6.3	100

that the majority of the tourists in our survey came from Greece and central Europe (59% and 34% respectively), countries of EE with a higher proportion of graduated people. The analysis of data showed that the level of education is directly related to the environmental knowledge and awareness, as well as to the recreational choices of the visitors, who mainly choose destinations with a protected and preserved natural environment and landscape. 30% of visitors with a high level of education declared that the existence of MNPZ played a decisive role in the choice of destination.

Generally, a high visitor' educational level is recorded in protected areas. For instance, in two protected areas of Brazil, Ibitipoca State Park (Ladeira et al., 2007) and Jalapao State Park (Dutra et al., 2008), 76% of respondents had a higher education level in the first case, and 64% of respondents had a university degree in the second case, 51% of which had a post-graduation (Rose Emilia et al. 2014). Furthermore, the educational level is related with visitors' environmental attitude and behavior, and contributes to a positive perception for biodiversity conservation of the protected areas (Vodouhe et al., 2010). In the southeastern Peruvian Amazon, the tourists with university level education showed greater interest in biodiversity and local cultures (Sovero et al., 2012). In our survey, concerning the Island of Zakynthos, we found a relationship between a higher education level and an interest in nature. Visitors with a higher education are more satisfied with the natural environment of Zakynthos and the behavior of local community. However, they highlight the significant environmental problems and, above all, the problem of cleanliness and the lack of strict rules for the protection of the Park.

Regarding the visitors' ages, the research showed that gradually the island is becoming a destination for young people < 30 years old. The younger ages declared they are very satisfied and will visit the island again (75%). On the contrary, the age group > 60, which represents the smallest percentage of the sample (9.1%), is not satisfied from the holidays in the Island, either by the cleanliness, and the vast majority will not visit the island again.

Generally, tourists with a good cultural background have a preference for natural experiences and, therefore, prefer eco-tourism. Ecotourism is based on the sustainable management of natural resources, the promotion of natural and cultural heritage and the promotion of biodiversity's conservation policies (Keitumetse, 2009). However, in our study, a significant percentage of the tourists that have high educational level and interest for the nature, they declared that they would not re-visit the island and would not recommend it to other tourists. They were disappointed with the cleanliness and the implementation of conservation measures in protected areas. A destination that relies on the environment and nature should be developed with planning, highlighting its natural and cultural values and taking precautionary measures to protect the environment (Yildirim, & Olmez, 2008). Indeed, sustainable tourism in protected areas is an important tool for their financial viability, subject to proper planning and monitoring (Leslie, 2001; Drumm, & Moore 2002; Eagles et al., 2002); Emerton et al., 2006).

However, in Zakynthos, alternative forms of tourism are almost absent. It is not possible for the visitor to experience the mountainous natural wealth. Eco-touristic actions are only limited within the NMPZ's area and for the observation of the Sea Turtle, an activity without design that creates great pressures on this endangered species. Particularly important is the fact that the information material is missing, for both topics a) for the NMPZ and b) for the environment of the island. This may also justify the ignorance of visitors to the question whether they know of some of the avifauna species that are found in the protected area. Promoting environmental education and organizing relevant activities could help improve the knowledge and awareness of visitors and local people (Randall & Rollins, 2009).

The lack of an effective management and gardening program from the NMPZ, caused to the failure of a National Environmental Strategy and Policy provide the importance, according the answers and the comments of the participants at the study, to re-determine the priorities and to re-create a new more environmental friendly tourist approach and model. The less they know about the environment the less they can dynamically participate to the conservation and be part of the protection of a protected area.

5 Conclusions

The present study investigated the knowledge and awareness of the visitors of Zakynthos, an Ionian island with three (3) Natura 2000 sites and one of the two Marine Parks of Greece. The study focuses on collecting data about the tourists and further analyses their profile. Indeed, data on the visitor's knowledge and perception of the environment, as well as their satisfaction with the stay and the experiences, are useful information and can contribute to the protection of the environment, the improvement of the environmental image and the sustainable development of the area. (Folke et al., 2002; Walker et al., 2002). Such actions are important in order to improve tourism in Greece, which is mostly based on the popular model of sea-sun-sand model. Mass tourism degrades the natural environment and the island is gradually becoming a destination only for young people with low income and without particular environmental information, concerns and sensitivities. According to Queiroz et al. (2014), it is important to keep a detailed understanding of the various target groups in order to enhance the competitive position of this type of tourism and contribute to the development of a strategic planning and local manager's policy, in regional decision-making. The results of the study could mark the start of a meaningful and responsible dialogue between stakeholders, with the aim of planning, managing the environment and implementing the rules, elements that are a precondition for improving the image of the island (Hunter & Green, 1995; Yu et al., 1997).

The differences in the answers, as concerned the approach of the environmental value of Zakynthos as touristic destination, have been registered at different groups of the participants (age, education, skills etc.) and highlight the need to restart and re-determine the touristic profile of Zakynthos following and including multi levels and multifunction of alternative approach for the touristic development. The principles of sustainability could react as indicators for the creation of a multifigure touristic destination.

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Chapter 20
Motives and Involvement of Tourists in Eastern Macedonia & Thrace

Antonios S. Dalakis, Georgia Yfantidou and George Costa

Abstract The present research concerns both tourism and the tourists' behavior who visit areas of Greece that offer outdoor recreational activities. Its purpose was to investigate the motives and the involvement of tourists on vacation. 3070 tourists participated in the survey. The results indicated that the demographics had affected the investigated factors. The research proposes many and important options in outdoor recreational activities in Eastern Macedonia & Thrace. These choices revealed from the preferences of the tourists in this area. At a theoretical level, this study is expected to help in developing tools for measuring tourism experience and practically to direct advertising costs for public and private operators by presenting the advantages of the region and tourists' selections. From all the above interventions, the indirect and immediate beneficiaries will be the tourists of the area to whom the research ultimately aims as its final recipients.

Keywords Outdoor recreational sport activities · Motives · Involvement · Demographic data · Regions · Tourism

JEL Classification L83 sports · Gambling · Restaurants · Recreation · Tourism

1 Introduction

One of the main peoples' activities during their free time is tourism. Modern tourism has become a multifarious phenomenon with social, economic, environmental and further dimensions in recent decades. The concept of "tourism" derives from the French word "tour" and the English "touring" meaning tour, touring. The root of both words is the Latin word tornus. The International Academy for the Study of Tourism (2015), argues that tourism is the set of human movements and

A. S. Dalakis (✉) · G. Yfantidou · G. Costa
Department of Physical Education and Sport Science,
Democritus University of Thrace, Komotini, Greece
e-mail: forest@otenet.gr

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activities that result from them and are motivated, to varying degrees and intensity, by the craving for escape, which is inherent in individuals. Conceptually, tourism is the development of the term "browsing" in modern societies. It is a phenomenon that combines the primordial need of man for knowledge and contact with the new (browsing), the need for recreation, rest, escape from everyday life, and is associated with new values that have been accepted by modern society (Yfantidou, et al. 2012).

The concept of tourism can be viewed from two perspectives: a theoretical one covering all aspects of the phenomenon, such as economic, social, psychological, and a practice that regulates exchange relationships. From its theoretical point of view it can be defined as the temporary transfer of people from their permanent place of residence to another place for reasons mainly psychological, non-profit motivation and organized effort to attract, welcome and serve people, while from the practical point tourism aims to find an appropriate way of understanding all those who are internationally engaged in tourism activities. The practical aspect of tourism has two aspects: the first refers to the movement of people, which represents the consumer part of tourism and is identical to tourism demand, and the second refers to the reception and servicing of the passengers, thus representing the productive part of tourism, which is identical to the tourist offer (Gartner 2001).

In 1963, the United Nations Conference on Tourism and International Travel in Rome defined as a 'visitor' any person moving to a country other than his permanent residence for any reason other than of a paid profession. The above claim concerns two categories of visitors, "tourists" and "excursionists" and can also be used for domestic tourism in their own country (Tsartas 1996). "Tourists" are temporary visitors whose stay is longer than 24 h in the visited country or region, whether on vacation or on business. On the other hand, "excursionists" are considered to be temporary visitors and stay less than 24 h in the country or region they visit (including those taking part in cruises) (Tsartas 1996). In spite of the common content of the above definitions, the concept of "tourist" has become the same as that of the "visitor", which is due to the internationalization of the term and the way of identifying the tourist phenomenon in all languages. In addition, according to the World Tourism Organization (WTO), the term "tourist" most often refers to holiday foreigners, while domestic tourism (domestic tourists) remains a question mark most of the time, as the characteristics of foreign tourists (Tsartas 1996). The term "tourism" includes all trips of people outside the place where they live, for every reason (fun, professional, educational, health reasons), excluding people traveling for less than 24 h.

A particular feature of this sector is the linking of its function with the internationalization of a large number of production sectors as well as the service industries of the economy. Thus, it can contribute to the economic development of a state or a place at three levels: (a) generation of income; (b) creation of jobs; and (c) creation of tax revenues. In addition, it broadens the production base of the regions where it takes place, and affects the growth of other sectors of the local economy, such as agriculture, commerce, construction, etc. However, to create these positive effects, the planning, management and control of tourism development processes are prerequisites (Rural Tourism Guide for Local Government Bodies 2008). Tourism is a new and rapidly growing sector of the global economy, which brings changes in the structure of modern societies.

2 Literature Review

According to Αγοραστάκης (2006) global tourism tripled between 1970 and 1992, while turnover from tourism increased sixteen times in the meantime. Today, tourism has the third place in the world's financial export activities, with oil first and cars second. In 1990, tourism's contribution to GDP was 5.5%. The number of arrivals in Europe increased from 190 million in 1980 to 288 million in 1992. European countries are the main destination of global tourism (60% of all international arrivals) and retain a large share of the world's tourism trade. The vast majority of European tourists (91%) choose to visit a region in Europe. Natural and cultural resources are an important asset for Europe's tourist areas. An important part—about 60%—of tourist activities at European level is dependent on the natural environment, while about 40% of tourist activities are based on urban or cultural data.

According to Eurostat (2017), tourism has a significant role to member countries due to its economic potential and growth potential employment, as well as due to its social and environmental consequences. Tourism statistics are not only used to monitor the European Union's tourism policies, but also its regional policy and its policy on sustainable development. In 2012, one in ten enterprises in Europe's non-financial business economy was in the tourism industry. These 2.2 million businesses employed around 12 million people. Businesses in industries with tourism related activities accounted for 9.0% of the total non-financial business economy and 21.9% of those employed in the services sector. The share of the tourism industry in total turnover and in labor cost inputs was relatively lower, as the tourism sector accounted for 3.6% of turnover and 5.5% of value added in the non-financial business economy. Permanent residents (aged 15 and over) of the European Union estimated about 1.2 billion tourist trips in 2014 for personal or business purposes. Short trips (one to three overnight stays) accounted for more than half (57.4%) of the total number of trips, and three quarters (74.9%) of all trips were made to domestic destinations and overseas. In some Member States, more than half of the total number of tourist trips in 2014 was made to destinations abroad.

According to the World Tourism Barometer of the World Tourism Organization (WTO), in 2015 world tourism recorded high numbers with 1184 billion international arrivals, recording an increase of 4.4%. In absolute terms, the above performance means that compared to 2014, in 2015, 50 million additional tourists travelled to another country in the world. The demand for travel was rising in 2015 all over the world, but significant variations have been recorded from country to country. World Tourism Organization (WTO) calls on governments to take measures to ensure a comfortable and safe environment for all who travel.

2.1 The Effect of Tourism in Environment

The tourist product and its consumption by tourists is a key issue in the tourist literature. The "capture" of the tourist as a consumer stems from the socio-cultural and geographic study and is also based on the science of marketing with the relevant literature (Jensen and Lindberg 2000; Yfantidou et al. 2018). Modern societies have highlighted environmental issues as the priority, recognizing the impact of human activities on the environment, the impact of environmental quality on human activities, and the universality of the relationship, i.e. the impact of local actions on the supra-local level on the planet with climate change. Tourism affects the environment and to a large extent also depends on the quality of the environment at the destination is known. In this context, however, one of the interesting issues is the influence of the sensitivity of the tourists/visitors/visitors on the environmental issues and the way of influencing the demand, as well as the offer to the tourist destinations (Polemitis et al. 2009). There are two main areas for assessing the importance of environmental issues in the market:

- The first area concerns the search for environmental performance in accommodations and services in tourist destinations, such as hotels with environmental certification (branding), adopting energy-saving practices, water recycling and waste reduction or "green procurement". This "performance" is increasingly being sought for the tourist destination itself (Yfantidou and Matarazzo 2017).
- The second area concerns products in the sense of contact with nature or recreation with mild forms compatible with the protection and conservation of natural ecosystems and resources in an area either consciously as "experience" in accordance with modern patterns of behavior and way or as an "alternative" to the prevailing experience of mass tourism (as something different). Often the term "alternative forms of tourism" is used, although the standards are different, as are their environmental impacts (Holden 2008). As modern societies return to core values, they become more sensitive, for example, on social and environmental issues, particularly as a response to the ever-growing global problems. This reorientation influences the markets, possibly the tourist flows and the requirements regarding the quality and characteristics of the local tourist product (Κοκκώσης and Τσάρτας 2001). Already in demand, environmental criteria in the choice of tourist accommodation as well as the destination of tourists, at least in sensitized markets (e.g. Germany, the Netherlands, Denmark, etc.), are already in demand.

2.2 Motives as a Scientific Dimension in Tourism

Individuals usually travel for more than one reason. The main incentives that tourists may make a trip are divided into four categories (Igoumanakis et al. 1999):

a. Naturally and climatically: Here are natural and climatic elements that attract tourists. Some of these are vegetation, soil geomorphology, temperature and sunshine. These incentives contribute to the shaping of certain forms of tourism, such as the sea, mountaineering, hiking, winter and mountain.
b. Cultural: Here are all the elements of culture that contribute to the cultural and cultural heritage of a region or country. Some of these are archaeological sites, museums, galleries, festivals and folk art. These incentives have a limited impact on today's visitors and especially on those who participate in mass tourist packages.
c. Economics: Here are the incentives that concern the economic elements of tourist packages and destinations. Some of these are the cost of living and entertainment, the travel cost and the cost of accommodation and hospitality. Economic data affect the majority of tourists-three, which are usually part of the average economic income.
d. Psychological: Here are the internal impulses of tourists visiting a destination and based on psychological need, feeling change or something new and different. Combined with economics, psychological incentives determine the decision-making of tourists in connection with the visit of known or new tourist destinations.

Changes in the incentives of tourists-three. A clear change in the incentives of tourists has been recorded, especially since 1980. From the search for organized and often passive—in terms of holiday activities, tourists look for travel more autonomously and searching for parallel activities (sports, touring, education, physical and healthy life) during the holidays. Critical to this change from the tourist, who travels with a predominantly motivation towards one/many tourists with many motivations, there have been two developments: the emergence of the environment as a particular factor in demand choices and an increase number of trips—mostly short-term—on an annual basis (Dalakis, Yfantidou, Tsitskari, Costa and Tzetzis 2016). There is, therefore, a dynamic increase in demand for both specialized trips and activities of this type combined with Organized Mass Traveling.

Sports tourism is not very well developed. In particular, existing golf courses are insufficient to attract tourists from this high-income tourist's category (Venetsanopoulou 2006). As far as maritime tourism is concerned, marinas are not enough, especially in the island, which is a hindrance to the development of maritime tourism in our country. Yachting is one of the country's fastest growing industries due to the sea and its many islands. In the Mediterranean area, Greece along with France and Turkey are very important markets, while during the summer season many boats are visiting Greek ports mainly from Europe. Particularly important for a country with the competitive resources available to Greece in both the above-mentioned special forms of tourism are the very significant positive economic consequences that are caused to the national and mainly the local economy by both cruise and yachting companies and from the consumption of tourists. As far as ski resorts are concerned, their number is sufficient. It is worth mentioning, however, that they face problems in the road network, which makes it difficult for visitors to travel to and from them, to specialize in staff, etc.

Several researchers have engaged in incentives to participate in outdoor leisure activities. One of the fundamental principles of motivation is the theory of self-efficacy of Bandura (1997), which proposes a social-cognitive model of motivation, oriented to the role of efficiency and human energy. It defined self-efficacy as the trust of individuals in their ability to organize and execute a series of actions to solve a problem or achieve a goal. Although incentives are only one of the parameters that interpret the behavior of individuals and, by extension, tourists, they are considered to be the most important, as they are the driving forces and impelling forces, behind any behavior (Crompton and Mackay 1989; Iso Ahola 1982). One of the theories, which study the motivation of tourists and is widely accepted by many scholars (Crompton and Mackay 1989), is that of pull & push factors. People travel because they are pushed and attracted by some forces. These forces describe how individuals are driven by these incentive variables when they make a decision to travel, but also how they are attracted to the destination.

2.3 Involvement as a Scientific Dimension in Tourism

Since the early 1980 s, the concept of blending is a popular subject of study amongst the researchers of consumer-three behavior because it appears to be an important variable in the process of processing information related to the products or services provided by an enterprise or an organization and the decision-making process for their purchase. In recent years, the concept of blending has attracted the interest of researchers from the field of recreation and sports, resulting in a large number of studies being published in the international literature (Laurent and Kapferer 1985; McIntyre and Pigram 1992). In trying to understand the behavior of participants in recreational activities, the researchers of this area included engaging in theoretical and empirical models, examining its relationship with other concepts that are important for the investigation of behavior, such as motivation, psychological commitment, the resistance to change of activity, the connection with the exercise and recreation area and the loyalty of the clients (Iwasaki and Havitz 1998, 2004; Kyle et al. 2003, 2004b). The involvement has been studied in order to understand the decision-making process for taking part in recreational activities (Iwasaki and Havitz 2004), why people choose these activities as a hobby (Funk and Bruun 2007; McGehee et al. 2003), and the dedication shown by visitors to the areas where the relevant activities are being developed (Havitz and Dimanche 1990, 1999).

Mixing with an activity, as at least conceptually defined above, remains constant over time and requires the consumer's continued interest in this recreational activity (Havitz and Howard 1995; Havitz and Mannell 2005; Kyle et al. 2006; Richins and Bloch 1986). This concept is often referred to the literature as "continuous mixing" and is different from the concept of "occasional mixing" (Havitz and Mannell 2005; Richins and Bloch 1986). Casual interference is more temporary, and its levels are then triggered for a specific situation for which the individual has to make a decision (Havitz and Howard 1995; Petty et al. 1983). Following the decision, high levels of mixing do not necessarily continue to exist (Siomkos 2002). It should be noted that usually mixing with a particular activity is a situation that remains relatively constant over time.

Finally, blending is a concept that is proposed as an important factor in consumer behavior and as such contributes significantly to understanding the choice of participation in recreational activities (Gursoy and Gavcar 2003; Havitz and Dimanche 1999; Kyle et al. 2003; Kyle and Chick 2004). The link between motivation and blending is theoretically supported by the work of Iwasaki and Havitz (2004), according to which motives are proposed as something prior to mixing in recreation (Kyle et al. 2006; Scott and Shafer 2001). Mixing seems to be an important concept of understanding the functioning and choices of individuals in leisure and tourism and is defined as an unobserved evolution of motivation (Havitz and Dimanche 1997).

3 Methodology

3.1 Sample

The sample of the survey consisted of 3070 tourists/visitors, of whom 1596 men and 1302 women found in the region of Eastern Macedonia and Thrace from 1-1-2015 to 31-12-2015. The age of the participants was divided into three categories according to Gibson (1994): (a) from 17–39 years of age (early adulthood); (b) from 40–59 years of age (middle adulthood); and (c) 60+ (late adulthood) (Yfantidou et al. 2008).

3.2 Description of the Instruments

The questionnaire used in this research was from a similar survey conducted in 2006 in the United States of America in the context of a doctoral research by Meng (2006) which was submitted to the Polytechnic Institute and the State University of Blacksburg, Virginia. The questionnaire contained four main factors and this paper will present two of them (c and d): (a) the Quality of Vacation Experience phase with four subcategories: the “Pre-Trip Planning Phase”, the “phase of movement from your home to the destination and back” the “On-site Phase” and “After-trip Phase”, (b) Perceived Destination Competitiveness, (c) Motivation and (d) Tourism Involvement.

According to Laurent and Kapferer (1985) the reliability of the factors was high. Similar were the results of Dimanche et al. (1991). A little lower was the results of the research by Jamrozy et al. (1996) but also reliable. Fewer parameters have been dealt with by Gursoy and Gavcar (2003); Jang et al. (2000); Kim and Petrick (2004) and their own results revealed reliable.

The questionnaire of this survey consisted of 4 pages. In the present paper, the third and fourth page were used. The third page included the tourists’ motives for vacation with 13 questions. The tourists’ involvement in the tourism process with 14 questions based on two scales, Zaichkowsky’s (1985), Personal Involvement Inventory (PII), and Laurent and Kapferer’s (1985), Consumer Involvement Profile (CIP). Both scales have been tested and the first one was supported by the following: McQuarrie and Munson 1987; Mittal 1989; Reinecke and Goldsmith 1993; Zaichkowsky 1987; Gursoy and Gavcar 2003; Havitz et al. 1993; Jamrozy et al. 1996; Kapferer and Laurent 1993; Laurent and Kapferer 1985; McQuarrie and Munson 1987; Mittall 1989; 1995; Rogers and Schneider 1993; Selin and Howard 1988. Finally, the general tourist behavior of the tourist examined by 5 questions.

The last page contained information on the type of holiday which tourists select with seven questions and they were also asked about their participation in outdoor recreational activities by ranking these activities. Demographic characteristics were also included in.

3.3 Description of the Tests

Fang Meng’s original questionnaire was in English, translated into Greek using the back to back method (Yfantidou et al. 2008) and adapted for the specific research needs. Then it was translated back to back again in English. It also translated into German, Polish and Bulgarian. The Romanian respondents completed questionnaires in English.

All the were given on a 5-point Likert scale with 1 “not significant” and 5 “very important”. In the case of the tourist’s involvement, the Likert 5-point scale, where 1 = “absolutely disagree” and 5 = “absolutely agree”.

Participants completed voluntarily the questionnaire. They were informed of the content of the questionnaire and the purpose of the survey and afterwards they completed the questionnaire.

3.4 Measuring Procedure

In the survey area 4000 questionnaires were shared, 3637 were returned and 3070 were considered suitable for the study (567 were removed because they had not been thoroughly completed).

The participants were searched in various places, such as hotels (*****Thraki Palace Alexandroupoli, AGRIANI Xanthi), on ferries (ferry boats Keramoti—Limenas Thassos, Alexandroupoli—Samothraki line), beaches (on the island of Thassos and Samothrace, in the areas of Xanthi and Alexandroupoli), in places where outdoor recreation activities were organized in various parts of the river Nestos, in the delta of the river Evros, in the gorge of Aggitis River, Lake Vistonida, the waterfall of Livaditis in Xanthi, the Straits of the Nestos River, the Falakro Drama ski center, as well as random visitors, found in different parts of the research area or in urban areas (the cities of Drama, Kavala, Xanthi, Komotini and Alexandroupoli) or in the nature (in the Xanthi forest, in the monasteries of Xanthi, in the area of Nymphaia in Komotini, in the park of Agia Varvara in Drama, in the castle of Kavala, in forest Dadias).

The participants in the survey were asked to complete the questionnaire according to their location and those who did the outdoor recreation activity filled it up immediately after the action, the people who travelled with the ship completed it during the trip, hotel guests in their rooms, etc.

3.4.1 Geographical Area of Research

The survey was conducted in the 13th Region of the country, Eastern Macedonia and Thrace, including five prefectures with a total area of 14,157 km^2 (GNTO 2003). The total population of the region is 608,182 inhabitants (census 2011) (Hellenic Statistical Authority 2017). The prefectures of the region are the prefecture of Drama, the prefecture of Kavala, the prefecture of Xanthi, the prefecture of Rodopi and the prefecture of Evros. The capital of the region is the city of Komotini, the capital of the Rodopi prefecture. There are two islands in the area, the island of Thassos, which administratively belongs to the prefecture of Kavala and the island of Samothraki, which administratively belongs to the prefecture of Evros. In the south the region is washed by the sea in four of the five prefectures, the Thracian Sea. The northern borders of the region are covered by the mountain range of Rodopi with the highest mountain Mount Falakro (2229 m) in the prefecture of Drama. The eastern point of the region is the country's border with Turkey, using for the most part the river Evros, the second largest river in the Balkans (Hellenic Statistical Authority 2017). The western border is the prefecture of Serres. The survey was conducted in northeastern Greece in the region of Eastern Macedonia and Thrace. The reason the survey was conducted in this area is that the headquarters of the university that the survey was conducted is in the area.

Following also the results of the pilot survey it was decided that this region is a large tourist destination for the northern Greece and it is important to conduct a research.

Furthermore, the area is famous for its incredible natural beauty, with areas protected by the international convention RAMSAR (Ramsar Convention 2018) and the European treaty NATURA 2000 (European Union 2009). Thus, there are 4 of the 11 areas of the country protected by the Ramsar Convention, the delta of the River Evros, Lake Ismarides, Lake Vistonida and the delta of the Nestos River. Of the 24 areas protected by the European treaty NATURA in the region there are 4: Dadia-Lefkimmi-Soufliou Forest National Park, Evros Delta National Park, Eastern Macedonia and Thrace National Park (Nestos, Vistonida, Ismarida) and National Park Rodopi mountain range. The area has a total of 6 rivers, the Strimona river, the Angitis river, the Nestos river, the Lissos river, the Arda river, Erythropotamos river and the Evros river. The area also has important lakes such as Lake Vistonida and Lake Mitroikos belonging to the Ismarida Lake group. The area also has important mountainous parts of the Rodopi mountain range with the highest mountain Mount Falakro, which also has the northernmost ski resort of the country. The island of Thassos with a perimeter of about 100 km and the highest mountain “Ypsario” with a height of 1206 m. The island of Samothraki with a perimeter of about 59 km which has the mountain Saos with the peak “Moon” of 1611 m. The district has 638 different categories of accommodation (from 5-star hotels to ecotourist hostels) (EMT 2018).

3.4.2 The Outdoor Recreational Research Activities

The activities carried out by the participants in the survey were divided into two categories: (a) moderate (canoe-kayaking at sea, river and lake, archery, athletic shooting, orienteering and mountain hiking) and (b) vigorous (rafting, diving, cycling, mountaineering, rock climbing-rappel, rope games (flying-fox), water sports, parapente and motor sports)

3.5 Design of Research

The independent variables of the survey were the gender, marital status, age, education, total annual income and occupation of the participants. The dependent variables were: the motivation of tourists-vacationers with 13 questions and the involvement of the tourist in the tourism process with 14 questions.

Research demographics, factor analysis, and reliability analysis were conducted for research purposes. Data were analyzed by MANOVA multivariate analysis in order to examine the independent with all dependent variables.

4 Results

Participants in the survey came from seven different countries and their entries in the survey are shown in Table 1.

The Greek participants were living or residing in 47 of the 51 prefectures of the country. The counties have been numbered according to the Ministry of the Interior (http://www.ypes.gr/el/regions/aytodioikhsh/statesmunicipalities/). The counties of which there were no participants were Argolida, Grevena, Laconia and Phocis.

The results of the multivariate analysis MANOVA variance showed that there was a statistically significant interaction of the three motive factors with all one by one of the independent variables (gender, marital status, age, level of education, total annual income and occupation), with Pillai's Trace test $F_{(116,2494)} = 1.485$ and sig = 0.001.

The results of the multivariate analysis MANOVA variance showed that there was a statistically significant interaction of the two involvement factors with all one by one of the independent variables (gender, marital status, age, level of education, total annual income and occupation), with Pillai's Trace test $F_{(200,2445)} = 1.784$ and sig = 0.001.

The overall picture of survey results showed that gender was the weakest factor since it showed the fewest statistically significant differences in most of the different categories examined (out of seven only two were statistically significant). This shows us that holiday is something that everybody wants, regardless of their gender and that the things that happen in this beautiful moment of people's lives find them all in agreement.

The "family situation" as a factor appeared to be the most important of the factors examined, since it was statistically significant in the seven different phases. Thus, if a person is free, married, widowed, divorced, in a dimension, cohabit or something else, it seems to be decisive for the selection of holidays, since the status of the participant makes him/her to choose a completely different option.

The different age of the participant appeared to be significant, since it was different in five of the seven categories examined. The age group aged 17–39 seemed more desirable to participate in holidays and activities with a second age group of 40–59 years and a third age group of 60 years and over. It did not mean, of course, that there was less willingness to leave in the research findings, but a

Table 1 Participants in the survey by country

Country	Men	Women	Total
Greece	873	793	1666
Great Britain	138	113	251
Germany	152	81	233
Poland	67	89	156
Bulgaria	292	169	461
Cyprus	36	31	67
Romania	37	27	64

lesser desire for a change in everyday life and different categories depending on the age of the participants.

The different “educational level” appeared to be a very important factor since it was different in six of the seven phases investigated. The results of the survey showed that all people, regardless of their level of education, want holidays, just everyone understands and chooses a different type of holiday depending on the stimulus it has.

The “annual income” appeared to be a very powerful factor since it was statistically significant in the seven different phases examined. This factor appeared to greatly influence the remaining five at any stage of the survey. The most important effect appeared to be in the competitiveness phase of holiday sites with the second the four phases of the tourist experience, the third phase of the engagement and finally the phase of holiday incentives.

Finally, the different “occupation” of tourists was very important, since in the six of the seven phases investigated, it was statistically significant. The results of the survey showed that it is of great importance what one’s profession is, in terms of the way in which he chooses his vacation, as this has to do with the previous category of research, the annual income, usually derived from the profession.

5 Conclusion

Motives

Personal motivations are the causes that drive a person into specific behaviors (Durall 1997). According to Ryan and Deci (2000), individuals are motivated by their own motivations, whose intensity and orientation vary and which are categorized internally and externally. Men and women do not differ enough in the cause of one or the other choice. However, the choices of both men and women are quite practical, such as how many kilometers away from the holiday destination, what we can do where we go, how beautiful we will go, what options we have for various actions, etc.

As far as the “family situation” of the participants is concerned, it seemed to be influenced by the different motivations, each of the different levels of the factor, with the motivations of those with another member with them to be of a lower level in terms of intensity and less bold than those who were on their own and had incentive to search for more extreme choices both at the holiday spot and in the outdoor recreational activities they are looking for.

Irrespective of the age category, all groups seemed to have different incentives to choose a vacation spot and outdoor recreational activity on their holidays. Thus, people aged 17–39 years chose a different category of holidays from the seven options available but the same age group of 60+ years, who also had a more relaxed attitude in their choice. The choice of activity was also independent of the age group, since people 60 + years chose “paragliding” or “water sports”.

As far as the "level of education" is concerned, it has been shown that the motivation and the specific factor has been a constant value, since people with any "level of education" chose to make their holidays in different parts of the area at different times of the year, are interested in capturing somehow the level of education they have. Similar behavior was also made for the realization of the outdoor recreation activities, which they had the opportunity to do in the area.

As far as the "annual income" factor is concerned, it appeared to affect the type of holidays and activities, as well as the incentives that motivate them. For the incentives that lead to the choice of the holiday spot, the above factor was crucial with choices of 5 * hotels or eco-tourist hostels, while in activities' incentives affected their number rather than their type. The results showed that the different "profession" of tourists and the different incentives that motivate someone to make holidays or activities are related to each other. Thus, people of all categories of professions wanted to participate in the holidays and even to do some outdoor recreational activity. Freelancers and students appeared to use most of the options available in the area for stays, while employees in either the public or the private sector had more central choices. As far as the outdoor recreation activities in the area were concerned, they were used with a relative balance between the different professional groups.

Involvement

Individuals regardless of gender feel their engagement with an activity and they consider it important. The results of the survey showed differences due to gender and the involvement in the holiday trip either during the winter or summer. Family status and its affect in involvement seemed to be significant, with the "singles" more easily selecting areas where more extreme actions were taking place, while the people who had a more "dependent" relationship (married), to choose places with greater security and lower intensity actions. The family situation of the participants in the survey and their involvement in the choice of destination and mode of travel and holiday seemed to be influenced by the different levels of the factor, with the "singles" being more of the last minute and choices, which may be considered more extreme (ecotourist hostels in particular areas), while tourists with more "dependent" status (married, in relationship) took care of their holidays more timely and chose simpler options (hotel in town).

Concerning the engagement, a different age group did not seem to behave differently as to the level of engagement either for the place they chose for their vacations or for the activities they chose to carry out in the place they had found but to the degree of engaging with the older ones to choose on the basis of what I did that made me go well and so I chose it again while the younger ones lead the team and the group more to lead them in what they will do. Concerning the different 'level of education', tourists had different behavior, both in terms of their involvement in the place they chose for holidays and in the activity they would carry out. Tourists with a higher level of education (college, TEI/TEI, postgraduate and doctorate) chose places where they wanted to see all the sights and everything else, while people (elementary, high school and high school), were more relaxed in their engagement with the place they chose and were in the opinion of visiting the basics/acquaintances, and with that they felt full satisfaction. Regarding the activities and the degree of their engagement with them, higher-level tourists chose actions that had an impact on their better image than those with a lower level of education who chose a little more randomly.

The "total annual income" factor was catalytic in terms of the degree of involvement of tourists in anything related to the places of visit within the holiday selection site and in the activity, they would choose. The different "profession" of tourists has been directly related to their involvement in the holiday selection site and what it provides in terms of activities. Thus, people in the private sector chose places where they would be given the opportunity to have many choices, while public sector people chose places with more limited choices. Students chose places where they could do activities and spend fewer days, while people with fewer choices in terms of profession tended to be involved in fewer activities than the core program.

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Part III
Tourism Online

Chapter 21
Impact of Social Media and Proprietary Media on Potential Tourists Holiday Planning Process. The Case of National Tourism Organizations

George Papadopoulos, Panagiota Dionysopoulou and George M. Agiomyrgianakis

Abstract Social media have established themselves as the prominent tool enabling touristic destinations, National Tourism Organizations and online travel agencies to influence the choices of potential tourists as well as their daily travel schedule on site. This paradigm shift is complemented by user generated content which is also considered to be extremely influential albeit not always reliable and has created a monstrosity of available data both in depth and scope on the supply and demand side of the touristic business. Notwithstanding the availability of this repository of big data, the answer to the question of what is the preference and the attached perceived significance of using specific social media platforms and National Tourism Organization proprietary media still remains vague. We thus investigate the nature of the usage of social media platforms and its perceived importance reaching the conclusion that although potential tourists seem to prefer the official touristic marketing portals of NTO's they simultaneously perceive the content as less useful than that of other social media platforms. This implies that NTO's must update their marketing portals more often and possibly rely more on intermediate thematically focused microsites which can link to their main marketing portals.

G. Papadopoulos (✉)
University of West Attica, Athens, Aigaleo, Greece
e-mail: ms13038@teiath.gr

G. Papadopoulos
Hellenic Open University, Patras, Greece

P. Dionysopoulou · G. M. Agiomyrgianakis
Hellenic Open University, Patras, Greece
e-mail: yoldi@minedu.gr

G. M. Agiomyrgianakis
e-mail: gmagios@otenet.gr

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JEL Classification L83

1 Introduction

Social media are extremely potent tools for disseminating touristic information about destinations due to their pervasiveness and their social impact, something which has revolutionized the manner that people share their knowledge. There exists a plethora of social media platforms which can be categorized into *Social Networking Tools* (Facebook, Google+, Myspace, etc.), *microblogs* (Twitter, private or personal), *picture-video sharing* (Flickr, Instagram) and *other collaborative websites* (Wikis) (Kaplan and Haenlein 2010; Osatuyi 2013). Online review platforms like Tripadvisor, Expedia and Yelp complement the previously mentioned social media and have become mainstream in the past several years, offering a rich data source that reflects user's experiences and evaluation of products (Schuckert et al. 2015).

The above mentioned online tools have led to an unprecedented increase in online information about touristic destinations something which has rendered big data analytics necessary in order to effectively utilize it. Big data is heralded as a new research paradigm that utilizes diverse sources of data and analytical tools to make inferences and predictions about reality (Boyd and Crawford 2012; Mayer-Schönberger and Cukier 2014). This has been rendered possible by the recent advancements in hardware technology which have enabled the application of powerful natural language processing and machine learning techniques (Halevy et al. 2009) to an enormous repository of data provided by online review platforms. Nonetheless, such a procedure is simultaneously fraught with danger due to data validity problems, which can crawl into the analysis procedure, rendering it partially inaccurate (Tufekci 2014). Traditional research medium like questionnaires and online surveys are also still relevant as is shown by the vast amount of research conducted using these techniques but they are being increasingly pushed aside in favor of analyzing data from social media and other online platforms (Japec et al. 2015).

Regarding the qualitative and quantitative assessment of social media there exist several value theories such as consumption value, service value and perceived value (Kim & Ko 2012); Gupta and Kim 2010; Sánchez-Fernández et al. (2007). Likewise, consumption activities are classified as having utilitarian and hedonic outcomes (Chung and Chulmo 2015). In this regard, Chung and Chulmo reached the conclusion that the travelers perceived value of social media had a positive significant influence on travel information searches. Furthermore, information reliability and enjoyment were found to be important benefits of social media usage for travel information search with both factors having a salient influence on the perceived value of social media. Finally, utilitarian consumption entails instrumental, task-related, rational, functional and cognitive aspects whereas the hedonic value theory includes the reflection of entertainment and emotional worth of shopping (Sanchez-Fernandez and Ángeles Iniesta-Bonillo 2007).

2 Social Media, Online Travel Communities and the Greek National Tourism Organization (GNTO)

2.1 Research Background

According to Papadopoulos and Dionysopoulou (2018), social media usage has transgressed four stages of evolution. The first is that of infancy (2003–2006), followed by the gradual growth phase (2007–2010), the booming development phase (2011–2013) and the maturity phase (2013-today). During the infancy stage, social media were mostly treated as a communication tool for teenagers while business had not yet grasped the significance of social media as a marketing tool. In the gradual growth phase, the first experimental attempts were conducted to use social media as a marketing tool. The touristic business was a pioneer in this phase since the communicative power of these new at the time media could quickly and effectively spread information about various touristic destinations. It was also quickly acknowledged that infamy could also be disseminated through social media and that social media response teams were required to counter such actions.

Moving on to the booming development phase, everyone wanted to jump on the social media bandwagon. Cost reduction, the ability to interactively communicate with potential customers and especially important for the touristic business the content contribution of tourists in various wikis and other content sharing services forced all major constituents of the touristic marketing world to adopt social media as a vital component of their marketing strategy. Finally, during the maturity phase the importance of social media is well acknowledged and no serious contender in the touristic sector is without some presence on them.

The value-based adoption model (VAM) has been used in many state of the art researches. Papadopoulos and Dionysopoulou (2018), using a simplified perceived value model, reached the conclusion that potential tourists attach higher perceived importance to private web sites and National Tourism Organizations (NTO) web portals than other social media. This was explained due to the importance of a renowned brand name propping the fame of posts or reviews on a social media platform, a concrete reality for NTO's but missing for most user-generated content. Moreover, the adoption of mobile internet was found to be based on a causal relationship between the perceived effort (e.g. ease of use and complexity) and the perceived quality (e.g. usefulness and reliability of information) (Kim & Ko (2012) and Gupta and Kim 2010).

Pertinent to the value-based model is the nature of the intentions to use social media. Parra-López et al. (2011) and Parra-López et al. (2012) pondered the question of what features contribute to the intention to use social media when planning their vacations. They found that the traveler's perception of how their vacation experiences are going to evolve (commenting on social networks, uploading photos and videos and trip evaluation) is an important element. Equally important is the tourist's own intention to increase his/her use of the technology tools while a final contributing factor was found to be the intention of recommending and encouraging friends or family to use these technologies. In addition, an assessment of using social media in terms of the functional, psychological and hedonic benefits was conducted by the authors, reaching the conclusion that the main reason for using social media is the benefits that the user perceives, mitigated or augmented by a series of conditioning factors that act as incentives. Among these incentives are the availability of technology, altruism, the environment, individual predisposition and trust on the user's information exchanged or posted online. A significant number of studies have also shown that reading travel reviews added fun to the trip planning process, made travel planning more enjoyable and made travelers feel excited about traveling (Gretzel and Yoo 2008; Gretzel et al. 2007; Parra-López et al. 2012). The hedonic factor of social media has also been recently confirmed through the positive relationship between the perceived hedonic benefits and intention to use social media for travel planning (Ayeh et al. (2013).

Moving on to the traveler's approach of using social media the literature states that travelers find motivation in the perceived functional benefits that social media provide (Parra-López et al. 2012). Non-altruistic reasons like information acquisition is an important factor influencing travelers to participate in online travel communities (Chung and Buhalis 2008). Typically, traveler's use of social media is divided in three phases: before, during and after the trip. Social media usage has been found to be mostly biased before traveling (Cox et al. 2009), wherein they play a crucial role in searching for ideas on where to go and acquiring information on accommodation options, excursions and other leisure activities (Cox et al. 2009; Fotis et. al 2012). The rate of social media usage during the trip takes a steep fall. In Fotis et al. (2012) study, 30% of the respondents searched for travel related information during their holidays while in Cox et al. (2009) that rating dropped to 6%. Sharing photos and videos during the holiday is more popular but it still remains only a fraction of the consumption mostly done during the planning process. However, Foursquare and other media geo-location can help foster the usage of social media during traveling by offering advice, discount and coupons. (Hudson and Thal 2013).

Nonetheless, most social media user generated content is posted after the trip (Fotis et al. 2012; Parra-López et al. 2012) wherein travelers create or publish their personal content which usually is comprised of text, images, audio and video (Shao 2009). Notwithstanding that the quantity of content that tourism review sites receive has substantially increased over time it still remains a fact that the majority of social media users still are content consumers Amaral et al. (2014). This has also been confirmed in other research, where it was found that the usage of social media is higher before the trip than during the trip and after the trip (Amaro et al. 2016). The authors went further after conducting a clustering analysis, positing that social media users can be segmented into five categories ranging from inactive, occasional consumers – apathetic creators, occasional consumers and creators, consuming enthusiasts and apathetic creators and fully engaged users. Travelers that usually purchased travel packages online, were found to belong to segments characterized by greater involvement with social media travel contents. In general, fully engaged social media users as well as occasional consumer and creators were younger and perceive higher level of enjoyment for travel purposes. This research also made a contribution to the clarification of a phenomenal controversy that previous studies had found. Specifically, Ip et al. (2012) had found that online media creation decreased with higher education level. Amaro et al. (2016) attributed this to the fact that doctoral degrees come with higher age and that that age group tends to post less content. In addition, Gretzel et al. (2007) found that in comparison to non-contributors, travel review writers are more involved in trip planning and are more influenced by reviews.

2.2 Social Media and the GNTO

The Greek National Tourism Organization (GNTO) is the official Greek governmental institution with the goal of applying touristic governmental policy, assessing new trends in the touristic marketing domain and operating a network of offices abroad. In particular, the offices abroad have the aim of promoting Greece in their countries of mandate and reporting to the ministry of Tourism on the effectiveness of its policy as well as possible measures to improve it. Social media is a basic tenet of the GNTO's marketing strategy since 2010 (Papadopoulos and Dionysopoulou 2018). Starting from a basic web site back in 2001, the GNTO now uses a plethora of web 2.0 platforms to communicate and disseminate information about renowned and not so well known regions of Greece. Some of these platforms are the marketing web portal (www.visitgreece.gr), the corporate web portal (www.gnto.gr), the visit Greece blog (blog.visitgreece.gr), Facebook, Google+, Twitter, Instagram, Pininterest and other social media visitgreece accounts which are updated daily.

The visitgreece web portal is the official marketing portal of Greek national and regional touristic destinations. Visitors of this portal can obtain general historical and cultural information about the various regions of Greece while simultaneously the portal also utilizes intelligent agents, which help prospective tourists choose a specific destination of Greece, starting from the kind of experience he/she wishes to live. Finally, the portal also offers information about cultural events happening throughout the whole country, ferry timetables, links to the various social media accounts of the GNTO and hosts various promotional videos of Greece [Source: GNTO official Google Analytics account].

Likewise, the corporate website contains information about the various laws pertinent to touristic development, information on the competitions of the GNTO for obtaining materiel and services, press releases, statistics on touristic arrivals and also hosts a gallery of copyrighted photos of Greece that can be used after permission of the GNTO. Finally, the visitgreece blog is updated at least twice a week by a network of specialized GNTO employees and contains real accounts of travelers to various regions of Greece, articles on regional Greek cuisine, articles on the flora and fauna of Greece and other subjects related to Greek cultural tourism.

Figures 1, 2 and 3 depicts page views of the visitgreece web portal, the GNTO corporate web site and the visitgreece blog for the time period 2016–2017. From the figure it can be seen that the all major online communication platforms of the GNTO have increased their popularity since 2014 (Fig. 3). Specifically, the visitgreece touristic marketing portal has seen an increase of 41% during the past two years 2016–2017. On the contrary, the hits of the corporate web site have remained on par with 2014 and surprisingly the blog has experienced a decline of 43%. A similar trend can be seen for the total users of the GNTO main marketing portal, the corporate web site and the blog. The increase of users and page hits of the main web site can be attributed to the increased interest in Greece as a safe touristic destination in the eastern Mediterranean, especially after the failed coup in Turkey during July 2016 and the repression that followed it as well the continuing activity of terrorist groups in Egypt.

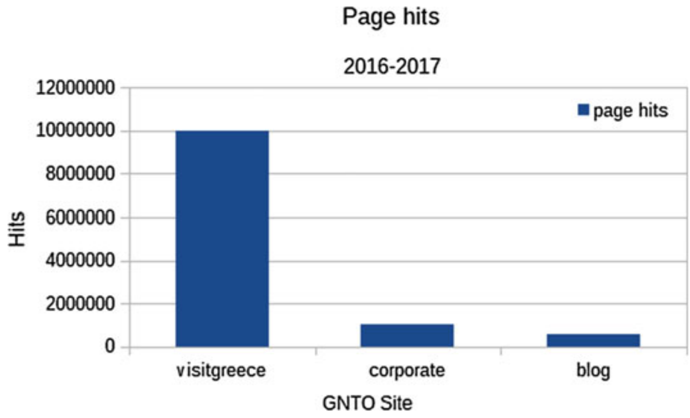


Fig. 1 Total page hits of the GNTO web sites family during the years 2016–2017

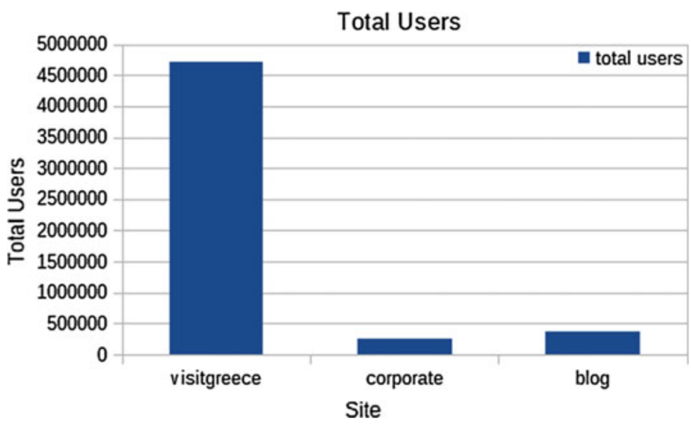


Fig. 2 Total users of the GNTO web sites family during the years 2016–2017

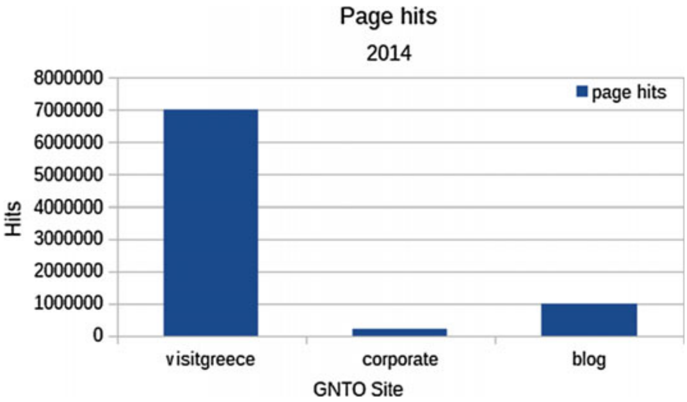


Fig. 3 Total page hits of the GNTO web sites family during the year 2014

3 Research Motivation and Methodology

3.1 Research Motivation

Although there exists much research on the effects of Social Media when planning a trip, it is still vague about which social media platforms have the biggest impact in terms of their reliability and their perceived importance on persuading a potential tourist to choose a specific destination. Motivated by this ascertainment we intended to investigate the causal relationship between being a user of social media of various involvement levels and the preferred-perceived importance of using specific social media. In the process we also pose a set of subsidiary questions related to the main subject.

3.2 Methodology

The experiment was conducted via an online survey platform (Limesurvey) utilizing an anonymous questionnaire which included four sections of questions. The first section comprised of demographic questions, the second section was comprised of questions related to social media usage and the third section assessed the preferred methods when searching for information on touristic destinations. Finally, the fourth section related to the perceived importance that respondent's attached to the methods of searching for information about touristic destinations.

Sections 1 and 2 contained multiple selection or exclusive selection questions while a Likert scale (1–7 scale, where 1 denotes the least interested and 7 fully interested) was used for the quantitative questions of Sects. 3 and 4. The URL link to the questionnaires was sent via email to employees of the GNTO and the Greek ministry of Tourism. Regarding the time span of the questionnaire, it remained active from April 9 2018 to April 15 2018. In total there were 106 fully completed questionnaires which were used for the analysis and were analyzed using the SPSS package version 25 using the bivariate correlation test. A simple count of participants belonging to each category (age group, gender, social media user, etc.) was also done for Sects. 1 and 2 while the average values of each question posed was used for Sects. 3 and 4

The goal of our experiment was to obtain insights about the usage of social media by prospective tourists in accordance with their demographic profile, their preferences for specific social media when searching for information on planning their trip and their perceived importance on using specific social media towards finding useful information. Since Facebook and Google+ are among the most popular choices regarding social media, a lot of the focus of this research pertained to their usage. As guidelines to our research we used the following questions on which the questionnaire was based:

Q1: Is there a strong correlation between the education level of an individual and social media usage when searching for information on touristic destinations?
Q2: Is there a strong correlation between generically using Facebook/Google+ and their corresponding usage when planning a holiday?
Q3: Is there a strong correlation between using Facebook/Google+ when planning a holiday and actively using these social networks (creating/posting content)?
Q4: Is there a strong correlation between using social media when planning for a holiday and the belief that social media exert an influence on their choice?
Q5: Is there a correlation between using social media and the preference for various means of searching for information on touristic destinations when planning a holiday?

For this question the responses were given in a 1 to 7 Likert scale, where 1 stands for least favorable and 7 the most favorable (Sect. 3 of the questionnaire). Furthermore, there were 8 categories, specifically: 1. I ask colleagues at work, 2. I seek information from specialized magazines, 3. I seek advice from friends in the physical world, 4. I visit the websites of official National Tourism Organization, 5. I follow social media, 6. I actively use social media (consume & post content), 7. I seek information from blogs, 8. I take part in virtual travel communities.

Q6: How correlated are the preferred means of searching for information on touristic destinations when planning a trip and the corresponding perceived importance?

For this question the responses were also given in a 1 to 7 Likert scale, where 1 stands for least favorable and 7 the most favorable (Sect. 3 of the questionnaire). Similarly, there were eight categories, one for each corresponding perceived performance of a preferred method of obtaining information about touristic destinations. Specifically these were: 1. Perceived importance of asking colleagues at work, 2. Perceived importance of seeking information from specialized magazines, 3. Perceived importance of seeking advice from friends in the physical world, 4. Perceived importance of visiting the websites of official National Tourism Organization, 5. Perceived importance of following social media, 6. Perceived importance of actively using social media, 7. Perceived importance of seeking information from blogs, 8. Perceived importance of taking part in virtual travel communities.

4 Results

4.1 Questionnaire Replies and Aggregate Values

Tables 1, 2, 3 and 4 depict the questionnaire of the conducted survey as well as the aggregate experimental results.

Table 1 Section one of questionnaire and aggregate results

Respondent's profile	Number of responses	Percentage of responses (%)
What is your age group?		
<18	0	0
19–25	1	0.94
26–40	37	34.91
41–60	65	61.32
>60	3	2.83
What is your gender?		
Male	43	40.95
Female	62	59.05
What is your employment status?		
Unemployed	1	0.95
Student	1	0.95
Civil Servant	97	92.38
Private Sector	4	3.81
Pensioner	2	1.90
How high are your annual earnings?		
<5,000 €	3	2.91
5,000 €–10,000 €	13	12.62
10,001 €–17,000 €	56	54.37
17,001 €–25,000 €	25	24.27
25,0001 €–50,000 €	4	3.88
50,001 €	2	1.94
What is your highest education achievement?		
Doctoral – Postdoctoral	4	3.77
M.Sc.	41	38.68
University Lyceum	46	43.40
Basic Education	15	14.15
	0	0
How often do you use the Internet?		
Not at all	0	0
Less than two hours per day	27	25.47
More than two hours per day	78	73.58
A few times a week	1	0.94
A few times a month	0	0

Table 2 Section 2 of quesionnaire and aggregate results

Respondent's social media profile	Number of responses		Percentage of responses (%)	
Social Network Usage?				
User	81		76.42	
Non-User	25		23.58	
Do you use Social Media when searching for domestic touristic destinations?	98		92.45	
Do you use Social Media when searching for foreign touristic destinations?	90		84.91	
Which media do you use when searching for touristic destinations?				
Private sectors pages	82		77.36	
NTO portals	60		56.60	
Facebook	52		49.06	
Twitter	13		12.26	
Google+	56		52.83	
YouTube	37		34.91	
Instagram	11		10.38	
Blogs	25		23.58	
Which social media do you use in general?				
Facebook	64		60.38	
Twitter	28		26.42	
Google+	67		63.21	
YouTube	66		62.26	
PinInterest	13		12.26	
Instagram	23		21.70	
Blogs	26		24.53	
None	12		11.32	
Do social media influence your destination choice?	Yes	No	Yes	No
	54	41	50.94%	38.68%

An intriguing fact, regarding the perceived importance of the preferred means of searching for touristic information when planning a holiday, was that National Tourism Organizations official websites still hold a prominent role as can be seen from Fig. 4, where the average value of the perceived importance of various methods for seeking touristic information when planning a holiday, is depicted. National Tourism Organizations are thus still perceived as important stakeholders in the touristic business hierarchy.

Table 3 Section 3 of questionnaire. Preferred method of seeking information on touristic destinations (Mean value)

Respondent's preferred usage	Average value
I ask my colleagues at work	3.96
I search for info in specialized printed press	3.58
I ask friends when I meet them upfront	4.44
I visit websites of NTOs	4.71
I visit private websites regarding touristic destinations	5.38
I keep a close eye on social media regarding tourism	4.14
I actively participate in social media regarding tourism	2.95
I keep up to date by reading various touristic blogs	3.98
I'm a member of touristic forums	1.97

Table 4 Section 4 of questionnaire. Perceived importance of various methods of seeking information on touristic destinations (Mean value)

Respondent's perceived importance	Average value
I ask my colleagues at work	4.26
I search for info in specialized printed press	4.25
I ask friends when I meet them upfront	4.33
I ask my contacts on various social media	4.01
I visit websites of NTOs.	5.06
I visit private websites regarding touristic destinations	5.33
I keep a close eye on social media regarding tourism	4.47
I actively participate in social media regarding tourism	3.59
I keep up to date by reading various touristic blogs	4.56
I'm a member of touristic forums	3.44

4.2 Correlation Analysis

Wishing to elaborate on the nature of the preferred means of searching for information regarding touristic destinations and their corresponding perceived importance we conducted a correlation analysis on the data given in Tables 1, 2, 3 and 4. From this analysis we reached the conclusion that the education level doesn't seem to have an effect on the desire to use social media, something which means that social media are enjoyed by all people regardless of their education level. Specifically, a double-sided Pearson test showed no relation between the independent variable of education level and the independent variable of social media usage, as is shown in Table 5. To add to that, generic users of Facebook and Google + also seem to trust these platforms when seeking information on touristic destinations. A null hypothesis that using Facebook/Google+ is not correlated to utilizing these platforms for information when planning a holiday could not be

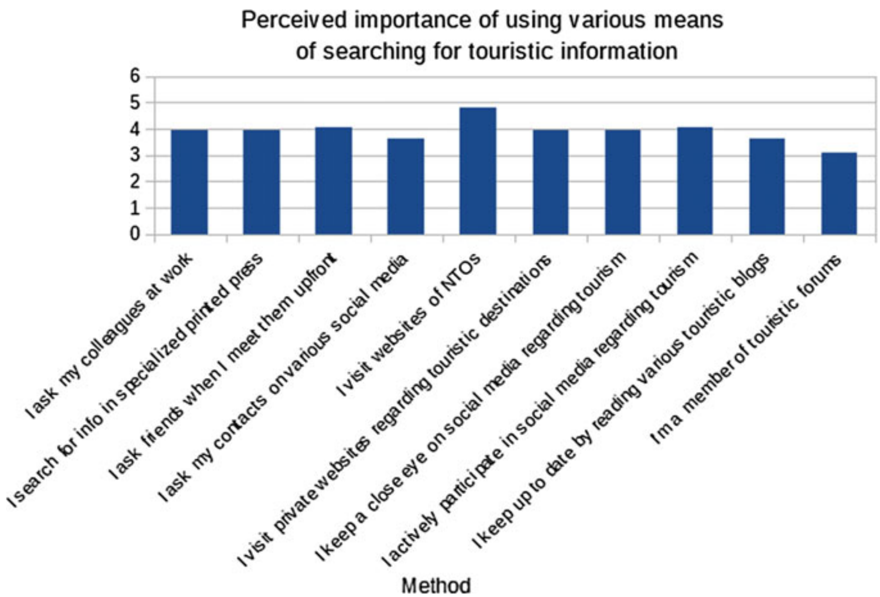


Fig. 4 Perceived importance of various methods of seeking information on touristic destinations

Table 5 Correlation between Social Media Usage and Education Level

	Social media usage
Education Level	
Significance (2 tailed)	0.230
Pearson Correlation	0.118

Table 6 Correlation between Facebook general usage and Facebook usage for seeking touristic information

	Facebook touristic
Facebook general	
Significance (2 tailed)	<0.01
Pearson Correlation	0.593

Table 7 Correlation between Google+ general usage and Google+ usage for seeking touristic information

	Google+ touristic
Google+ general	
Significance (2 tailed)	0.004
Pearson Correlation	0.277

verified using a double-sided Pearson Test. This can be seen from the data of the experimental analysis using SPSS shown in Tables 6 and 7.

It was further found using a similar analysis that users that avail of Facebook services for seeking touristic information when planning a holiday do not actively

Table 8 Correlation of Facebook generic usage to actively posting content on Facebook

	Active user of FB
Facebook touristic	
Significance (2 tailed)	<0.01
Pearson Correlation	−0.641

Table 9 Correlation of Google + generic usage to actively posting content on Google+

	Active user of Google+
Google touristic	
Significance (2 tailed)	<0.04
Pearson Correlation	−0.277

Table 10 Correlation of using social media to being influenced by them regarding the choice of touristic destination

	Social Media Influence
Social media user	
Significance (2 tailed)	<0.005
Pearson Correlation	0.270

post content on it (Table 8). A similar trend was also found for Google+ users (Table 9). However, this trend seems to be more prominent on Facebook than on Google+, which seems to point that Google+ is considered a more reliable or serious platform for posting or sharing information on touristic destinations. In any case, our findings strengthen the results of previous research, wherein most social media users consume rather than create content. In the above context, an active user of Facebook/Google+ was one who declared that he/she posted content as opposed to a passive user (consumer) who does not. In addition, it seems that social media users believe that they are being influenced by the usage of the medium (Table 10) which empirically proves what researchers and theory have postulated since the infancy of social media.

Regarding the preferences of social media users, it is interesting to note that using social media has absolutely no effect on the desire of individuals to ask for advice or information while planning their holidays from colleagues in their workplace (Table 11), consulting specialized touristic magazines (Table 12), consulting friends in the physical world and visiting the web sites of National Tourism Organizations (Tables 13 and 14). These forms of activities for obtaining information on touristic destinations seem to be completely decoupled from the usage of social media. On the contrary, social media users prefer to mostly base their choices

Table 11 Correlation of social media usage and preferring to ask a colleague at work regarding touristic information

	Ask Colleagues at work
Social Media User	
Significance (2 tailed)	0.16
Pearson Correlation	−0.234

Table 12 Correlation of social media usage and preferring to read specialized magazines regarding touristic information

	Read specialized magazines
Social Media User	
Significance (2 tailed)	0.136
Pearson Correlation	−0.146

Table 13 Correlation of social media usage and preferring to get advice from friends

	Ask friends in the physical world
Social Media User	
Significance (2 tailed)	0.269
Pearson Correlation	−0.108

Table 14 Correlation of social media usage and preference of visiting an NTO website regarding touristic information

	Visit NTO websites
Social Media User	
Significance (2 tailed)	0,149
Pearson Correlation	−0.128

Table 15 Correlation of social media usage and preference for following many social media platforms regarding touristic information

	Follow various social media
Social Media User	
Significance (2 tailed)	<0.01
Pearson Correlation	−0.472

Table 16 Correlation of social media usage and preference for contributing content pre-trip or on holiday

	Contribute content to social media
Social Media User	
Significance (2 tailed)	<0.001
Pearson Correlation	−0.435

Table 17 Correlation of social media usage and preference for following touristic blogs

	Follow blogs
Social Media User	
Significance (2 tailed)	<0.003
Pearson Correlation	−0.289

on one social media platform (Table 15), prefer not in their majority to contribute content and are not simultaneously interested in reading blogs with touristic content (Table 16 and 17). It also seems that the usage of social is not directly linked to the desire to offer content on wikis or other online travel communities (Table 18). To sum things up, the most important findings were that most social media users identify with a specific platform on which they mostly consume data and that

Table 18 Correlation of social media usage and preference for following touristic online forums

	Take part in touristicfora
Social Media User	
Significance (2 tailed)	0.070
Pearson Correlation	−0.177

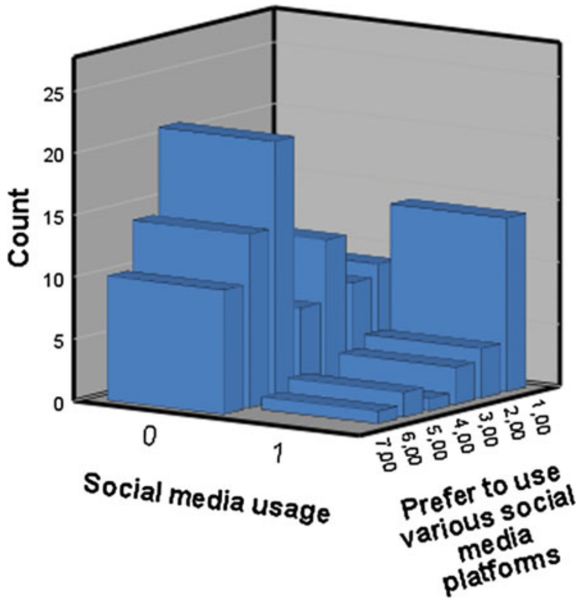
traditional means of searching for touristic information remain in the forefront, on par with modern means of searching for touristic information.

From Fig. 5, it can be seen that the majority of social media users (index 1 on horizontal value) have a very low Likert scale score which is a clear peak from all other Likert scale selections and that is a statistically important difference according to Table 15. This can be explained by the fact that social media users prefer to use one social media platform when searching for information on touristic destinations.

Furthermore, as was discussed above, it can be clearly seen from Fig. 6 that social media have no effect on the preference of potential tourists to visit NTO portals regarding obtaining information on touristic destinations.

Moving on to the perceived importance (Tables 19, 20, 21, 22, 23, 24, 25 and 26) of the preferences shown in Tables 11, 12, 13, 14, 15, 16, 17 and 18 and discussed above, it is interesting to note that all the examined dependent variables that exhibit a significant statistical significance ($p < 0.05$) were found to be inversely correlated to using social media. Thus, the available data shows that using social media is inversely related to the perceived importance of asking colleagues

Fig. 5 Preference to use various social media platforms



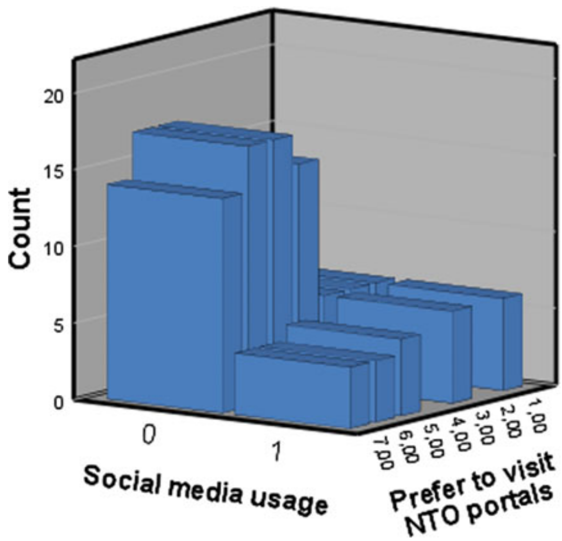


Fig. 6 Preference to visit NTO portals

Table 19 Correlation of being a social media user and perceived importance of asking colleagues at work regarding touristic information

	Ask Colleagues at work
Social Media User	
Significance (2 tailed)	<0.002
Pearson Correlation	−0.299

Table 20 Correlation of being a social media user and perceived importance of asking colleagues at work regarding specialized magazines on tourism

	Read specialized magazines
Social Media User	
Significance (2 tailed)	<0.006
Pearson Correlation	−0.264

Table 21 Correlation of being a social media user and perceived importance of asking friends besides work in the physical world

	Ask friends in the physical world
Social Media User	
Significance (2 tailed)	<0.043
Pearson Correlation	−0.197

for advice on touristic destinations (Table 19) which also holds for reading specialized magazines and asking friends besides colleagues in the physical world (Tables 20 and 21). It seems that users perceive these activities as having less to offer regarding obtaining information on touristic destinations in comparison to social media platforms. Nonetheless, they still prefer to use them.

Table 22 Correlation of being a social media user and perceived importance of visiting an NTO website regarding touristic information

	Visit NTO websites
Social Media User	
Significance (2 tailed)	<0.01
Pearson Correlation	−0.406

Table 23 Correlation of being a social media user and perceived importance of following more than one social media

	Follow varioussocialmedia
Social Media User	
Significance (2 tailed)	<0.006
Pearson Correlation	−0.264

Table 24 Correlation of being a social media user and perceived importance of contributing content on social media while planning a holiday or on holiday

	Contribute content to social media
Social Media User	
Significance (2 tailed)	0.043
Pearson Correlation	−0.197

Furthermore, using social media does not preclude appreciating the importance of visiting NTO websites for touristic information (Table 22) but it does seem that social media users are more tied with a specific platform as opposed to a plethora of platforms (Table 23). Pluralism is not considered to be very crucial for most users of social media, which can be explained out of user loyalty to a specific social media platform. Contributing content on social media or online review platforms also seems not to be a very important factor for most social media users, something which is consistent with previous findings that most social media users are consumers (Table 24).

Finally, obtaining information from blogs is negatively correlated to using other social media (Table 25). This points to the direction that blogs are specialized platforms for users that required refined or more detailed information. Most other social media platforms contain concise information or consist mostly of buzz words that strive to capture the attention of potential tourists although they do not offer detailed information. Taking part in touristic forums is likewise completely unrelated to using other social media (Table 26).

From Fig. 7, it can be graphically seen that social media users perceive the importance of visiting NTO portals as not very important when seeking information on touristic destinations. This is a significant important correlation as can be seen from Table 22.

Table 25 Correlation of being a social media user and perceived importance of following touristic blogs

	Follow blogs
Social Media User	
Significance (2 tailed)	<0.001
Pearson Correlation	−0.406

Table 26 Correlation of being a social media user and perceived importance of taking part in touristic forums

	Take part in touristicfora
Social Media User	
Significance (2 tailed)	0.123
Pearson Correlation	−0.151

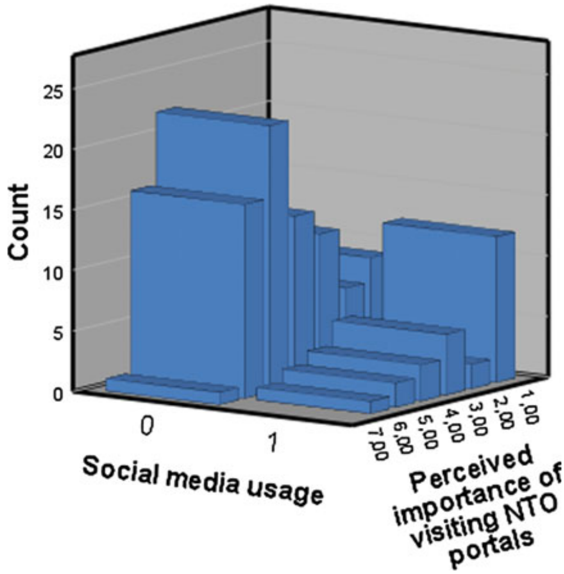


Fig. 7 Perceived importance of visiting NTO portals

5 Conclusion

Our research has shed further light on the relation between using social media and the perceived practical or hedonic benefits acquired from their usage. Firstly, it is interesting to note the usage of social media had little impact on the preference of potential tourists to use various alternative means of searching for information before committing on a vacation plan, as supported by the fact that only 2/8 responses regarding social media users were found to have a statistically significant impact on the preference of alternative means of searching for touristic information when planning a trip (Tables 11, 12, 13, 14, 15, 16, 17 and 18). Specifically, the only responses negatively related to social media usage were: 1. Do you contribute content on various social media platforms as opposed to a single platform? 2. Do you visit blogs regarding touristic destinations? This seems to verify the fact that most social media users are consumers and that they do not regularly visit blogs for seeking touristic information when planning their trip. Simultaneously, 7/8 responses regarding the perceived significance of the previous preferences were found to be inversely related to social media usage in a statistically significant way (Tables 19, 20, 21, 22, 23, 24, 25 and 26). Specifically, using social media seems to degrade the perceived benefits of asking a colleague at work for information on touristic information. Nonetheless, people still prefer that option possibly out of inertia or the need to socialize. A similar trend exists for the relation between using social media and reading touristic magazines, asking friends besides colleagues in the physical world and visiting NTO web sites.

Our research further expands the findings of Papadopoulos and Dionysopoulou (2018), in which the authors had posited that social media accounts linked to a strong brand name, like those of National Tourism Organizations, are considered more reliable than other social media accounts. Although this certainly remains the case and most users will visit the main marketing portal of an NTO, at the same time they perceive the content of the site of an NTO per se as less important in comparison to social media. The precise nature of this relationship is not very clear but we surmise that this due to the slow update pace of marketing portals as opposed to the dynamic and ever shifting nature of social media platforms. Potential tourists seem to prefer the official touristic marketing portals of NTO's while they simultaneously perceive the content as less useful than that of other social media platforms. This implies that NTO's must update their marketing portals more often and possibly rely more on intermediate thematically focused microsites which can link to their main marketing portals.

In our future research we intend to investigate how third party generated content influences social media users regarding the choice of their touristic destination as opposed to social media connected with a renowned brand name.

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Chapter 22
Internet Marketing Communication of Destination Management Organizations in Slovakia: The Case Study

Radka Marčeková, Ľubica Šebová and Kristína Pompurová

Abstract The case study deals with the examination of internet marketing communication of all Destination Management Organizations (36) in Slovakia. It identifies the current status and outlines the possibilities for its further development. The study applies the results of primary research, gathered during the months of October 2017 to January 2018 and analyzes the ways of internet marketing communication investigated in Destination Management Organizations (DMOs). The study divides them into five categories, which are characterized. The results of the research point to the fact that only 17% of DMOs in Slovakia is currently actively involved in the use of well-known and available internet marketing communication tools. The same share (17%) use these tools sufficiently, with approximately 33% of DMOs are acting poorly and the sites promote weakly, 28% being significantly less active in internet marketing communication, and around 5% are totally inactive, and are not using any internet marketing tools at all. It means that in Slovakia there are still unused opportunities for better promotion of individual regions in the tourism market, which are outlined in the study. It applies theoretical methods of investigation and methods of descriptive statistics.

Keywords Destination management organization (DMO) · Internet · Marketing communication

JEL Classification L83 · M38

R. Marčeková · Ľ. Šebová (✉) · K. Pompurová
Department of Tourism and Hospitality, Faculty of Economics,
Matej Bel University in Banská Bystrica, Tajovského 10,
975 90 Banská Bystrica, Slovakia
e-mail: lubica.sebova@umb.sk

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1 Introduction

In Slovakia to the January 18th 2018 there was a total of 36 local tourism organizations (DMOs), which started their functioning after the adoption of Act no. 91/2010 Coll. on tourism support (from December 1st 2011). According to the Slovak law DMOs can be set up by at least 5 municipalities which have reached at least 50,000 overnight stays in the previous calendar year in the area of their competence, respectively by fewer municipalities if they have reached at least 150,000 overnight stays.

The mentioned law act does not take into account the homogeneous approach to the creation of tourism regions, many local organizations are therefore set up without respecting the natural borders of the regions and often cover the territory with a markedly different nature of tourism attractions (Kucerova et al. 2006). Therefore it is possible that the application of the marketing mix tools for DMOs may be problematic. To the primary activities of DMOs belong promotion and presentation of the region or city in which they operate.

An important tool of the marketing mix is marketing communication, which significantly changes its character in the last period of time in Slovakia (especially after 2000). In addition to the traditional communication tools, internet marketing tools whose implementation in practice contributes to the development of sustainable tourism, are more and more frequently applied. They are also less financially and materially demanding. The article deals with the research of the used internet marketing tools in the established DMOs in Slovakia.

2 Literature Review

Marketing communication is a program of communication methods and tools by which the destination addresses both the visitors and the wider public. It has been a point of interest for many authors already in more decades (Bennet 1988; Bruhn 2013; Kotler et al. 1994; Kotler et al. 2007; Kotler and Keller 2013; Maráková and Šimočková 2015; Meffert 1986; Nieschlag et al. 1997; Noyes 2015; Pelsmacker et al. 2003; McCabe 2009; Wiktor 2013 and others).

The goal of all DMOs is to systematically increase visit rate of the tourism destinations that can not be achieved without efficient and effective marketing communications, which is why the marketing communication is also a part of the destination marketing. Marketing on the level of destination is a point of interest of authors in many studies (Almeida-Santana and Moreno-Gil 2017; Li et al. 2017; Mariani et al. 2017; Merická and Šebo 2010; Almeida-Santana and Moreno-Gil 2017; Pike 2016; Shao et al. 2016; Šebová et al. 2016 and others).

With the rapid development of the modern technologies that can positively stimulate the development of tourism, there have been also developed the ways of marketing communication of the subjects who act in the destinations. Traditional communication is becoming increasingly replaced by electronic. It is used both by the private and the public sector under the common brand name of the destination management organization, which is the holder of the cooperative management in the destination. As the internet is the fastest way to spread information in tourism, the destinations become closer and accessible to potential visitors.

Authors understand the internet marketing communication as a trend based on the use of the information technologies (Falát and Holubcík 2017; Ivanov 2012; Mathews et al. 2016; Semerádová and Nemecková-Vávrová 2016 and others). Its most significant benefits include 24-h possibility to communicate with customers, questioning, getting feedback, immediate response to updated content, updated content at any time, the ability to reach customers without geographic limitations at any distance and so on.

Internet marketing communication is also used by regional and local tourism organizations in Slovakia (DMOs), which may be set up according to Act no. 91/2010 Coll. on tourism support from December 1st 2011.

One of the main activities of DMOs is the creation and realization of marketing activities and the promotion of tourism in the destination at home and abroad. The use of the internet for communication, in particular through the dynamic and interactive web site of the destination, is now seen as one of the basic prerequisites for success in the competitive battle.

The basic way of internet marketing communication currently include (a) the website, (b) the existence and communication of the subject on social networks, (c) e-mail communication (e-mail), and (d) various forms of mobile marketing.

(a) In order for the website to fulfill its purpose, it is necessary to reach the correct segment of the visitors so that visitors stay active on the website and to motivate them to perform the conversion (click, write, publish on their own social networking profile, etc.). It should have an attractive design (simple processing, sensitive and representative color selection), valuable and up-to-date content and intuitive navigation. Surveys confirm that if the website does not interest the user enough or he doesn't find what he was looking for within 8 s, he leaves it (Buranovský in Gúcik et al. 2011). In order for websites to be most visited, they need to be optimized for search engines (SEO, search engine optimization). SEO includes a set of tools which allow the search engines to find a particular page by the visitor's input, and prioritize it in the search results (e.g. domain name, site address, page description, title, keywords, credibility, and relevancy of the page).
(b) The popularity of discussing groups and forums has led to the emergence of a large number of internet sites that use C2C (customer-to-customer) internet capabilities (Kotler and Keller 2013). It means the exchange of product and service information between the consumers themselves, who create internet communities. It works as a virtual community where pre-registered members meet and communicate. There is a large number of social networks, bringing together a variety of users and focusing on different areas. The most widespread social network in our conditions is Facebook. According to the research it had a

total of 60 million active users in the world in 2007, 800 million in 2012 and 1.5 billion in 2015 (Noyes 2015).

To the greatest benefits of social networks belong the precise targeting of marketing activities, low financial difficulty, interactive communication and feedback, relative credibility and extremely fast and efficient expansion of the information.

(c) E-mail as a direct marketing tool allows the subjects to create the lists of both current and potential visitors, distribute e-mail messages with current offer by e-mail, and strengthen the both side relationship. According to Act no. 351/2011 Coll. on electronic communications, the use of electronic mail is permitted for marketing purposes only with the prior agreement of the recipient. The granted agreement must be verifiable and may be revoked at any time.

(d) Mobile marketing enables the subjects to interact and cooperate with visitors in an interactive way through any mobile device (mobile phones, smartphones, PDAs, tablets, laptops, etc.). Its benefits include the ability to reach out a specific customer, the ability to create interaction between the sender and the recipient of the message, high real-time flexibility, easy and fast updating, user comfort, low cost, broad usage possibility and simple measurability of the feedback.

3 Methodology

The aim of the article is to revise the marketing communication of local destination management organizations on the internet and on the basis of the research results to identify the possibilities of its improvement.

The object of the research are local destination management organizations and the subject of the research is marketing communication on the internet.

The Ministry of Transport and Construction of the Slovak Republic currently (as of January 08th 2018) records 36 existing DMOs (Table 1). The basic research file is created by all local DMOs in Slovakia. The basic research file is identical to the selection file.

We use primary data sources in addition to secondary ones. We analyze the available ways of internet marketing communication, which we evaluate according to established criteria (Table 2), formulated on the basis of information drawn from the literature.

We evaluate the part of the criteria quantitatively on the scale from 1 to 2, 3, resp. 5 (Table 2) and the other part depending on their use (0/1, where 0 = not used, 1 = used). By the criteria we undertake to the assessment scale, we focus on the subjectively determined characteristics presented in Table 3.

The survey took place between October 2017 and January 2018. Based on the number of points earned we divide DMOs into categories whose names matches their characteristics (Table 4).

Table 1 Local destination management organizations (DMOs) in Slovakia

1. DMO Bratislava Tourist Board
2. DMO Dudince Tourism
3. DMO Nitra tourist board
4. DMO Horný Zemplín a Horný Šariš
5. DMO Klaster Orava
6. DMO KOŠICE—Tourism
7. DMO Kysuce tourist board
8. DMO Malá Fatra
9. DMO "The Small Carpathians"
10. DMO Nízke Tatry Juh
11. DMO Rajecká dolina
12. DMO Banská Štiavnica Tourism
13. DMO Region GRON
14. DMO Region HORNÁ NITRA—BOJNICE
15. DMO Horné Považie Tourist Association
16. DMO REGION LIPTOV
17. DMO Senec Region
18. DMO Šariš Region
19. DMO Vysoké Tatry Region
20. DMO REZORT PIEŠŤANY
21. DMO PODUNAJSKO
22. DMO SEVERNÝ SPIŠ—PIENINY
23. DMO Slovenský Raj & Spiš
24. DMO Central Slovakia Tourist Board
25. DMO "Šariš"—BARDEJOV
26. DMO TATRY—SPIŠ—PIENINY
27. DMO Regional Tourism Association Tekov
28. DMO Regional Tourism OrganisationTrenčianske Teplice
29. DMO Trenčín-Country-Surrounding
30. DMO Trnava Tourism
31. DMO TURIEC—KREMNICKO
32. DMO TOUR NOVOHRAD AND PODPOĽANIE
33. DMO Vysoké Tatry—Foothills
34. DMO Regional Tourism OrganisationZáhorie
35. Zemplínska DMO
36. DMO Žitný ostrov

Source The Ministry of Transport and Construction of the Slovak Republic, 2018

Table 2 Evaluation criteria of the internet marketing communication of DMOs

The ways of the internet marketing communication	Evaluation criteria	Evaluation scale
Internet website	SEO	0–5
	Design	0–3
	Intuitive navigation	0–3
	Fotogalery	0–3
	Responsive design	0/1
	Possibilities of the search on the website	0/1
	Search for accommodation	0/1
	Reservation of accommodation	0/1
	Reservation of other services	0/1
	Map	0/1
	Interactive map	0/1
	Calendar of events	0/1
	Possibility to download electronic brochures	0/1
	Webcam	0/1
	Weather report	0/1
	Link to other websites	0/1
	Connect to social networks	0/1
	"Send/Recommend to a friend" option	0/1
	Feedback from visitors option	0/1
	Live chat	0/1
Social networks	Number of active accounts	0–3
	Number of followers	0–3
	Speed of response	0–2
E-mail	Distribution of the information leaflet	0/1
Mobile application	Application existence	0/1
	Support of multiple operating systems	0/1
	Application functionality	0–2
	Application options	0–3
General criteria	Recency of information	0/1
	Relevance of information	0/1
	Language mutations	0–3

Source Own elaboration, 2016

Table 3 Characteristics of the evaluation criteria

The ways of internet marketing communication	Criteria characteristics	Evaluation explanation
Internet website	SEO	5 p. – 1. place in search
		4 p. – 2. and 3. place in search
		3 p. – 4. to 6. place in search
		2 p. – 7. to 10. place in search
		1 p. – 11. to 20. place in search
		0 p. – 20. place in search and lower
	Design	3 p. – interesting modern design
		2 p. – modern design
		1 p. – basic design
		0 p. – inappropriate design
	Intuitive navigation	1 p. – well-arranged
		1 p. – suitable site structure
		1 p. – simple movement on the site
	Fotogalery	1 p. – quality photographs
		1 p. – actual photographs
		1 p. – photographs characteristics
Social networks	Number of active accounts	1 p. for each active account on the social network (maximum 3 points, if there are more than 3 accounts)
	Number of followers	0 p. – from 0 to 500 followers
		1 p. – from 501 to 1000 followers
		2 p. – from 1001 to 3000 followers
		3 p. – from 3001 followers (unlimited)
	Speed of response	2 p. – up to 1 h
		1 p. – up to 1 day
		0 p. – more than 1 day
Mobile application	Application functionality	2 p. – fully functional application
		1 p. – some functions limited
		0 p. – nonfunctional application
	Application options	1 p. – relevant content
		1 p. – intuitive handling
		1 p. – functioning also without internet connection
General criteria	Language mutation	1 p. for every language mutation of the website (maximum 3 points, if there are more than 3 mutations)

Source Own elaboration, 2016

Table 4 DMOs categories

Category name	Category characteristics	Reached number of points
Tigers	DMOs significantly active in electronic marketing communications. An easy-to-read and modern website uses most of the reviewed criteria. DMOs adequately active on social networks, developed mobile apps for visitors. They actively promote destinations	35 and more points
Dolphins	DMOs appropriately active in electronic marketing communications. A high-quality and modern website. Active on social networks. They use many ways of internet marketing communication, but not all available. They still have something to learn, they want to learn and they are on the right way	From 25 to 34 points
Turtles	DMOs less active in internet marketing communications. Website at a weaker level, but with basic information about the destination. They use some of the available ways of internet marketing communication. Poor promotion of destinations	From 15 to 24 points
Snails	DMOs significantly less active in electronic marketing communications. The website or social networks do not serve effectively to inform visitors about the destination, they have little or no value for a visitor. A radical change in access to electronic marketing communications and promotion of the destination is needed	From 5 to 14 points
Dead bugs	DMOs inactive in electronic marketing communications. There are no social network sites or accounts. No promotion of the destination. Also included are newly-formed DMOs that have not yet been able to implement a functional internet marketing communication	From 0 to 4 points

Source Own elaboration, 2016

The allocation of the DMOs corresponds to the state of internet marketing communication at the time of the research.

We use theoretical methods of research, such as analysis and synthesis, induction and deduction, the method of comparison and the abstraction method. From mathematical—statistical methods, we use methods of descriptive statistics (arithmetic average and median).

4 Results

With regard to the extent of the article, we present the complex results of the primary survey and the most interesting findings on the number of DMOs with the result obtained.

Web page. Own website use 34 of 36 DMOs in Slovakia. Existing websites of DMOs are mostly design-friendly, design is usually modern, page structure is clear.

The easiest way to get information about the destination is via web search engines. Therefore it is important to optimize the web site so that web search engines show it in the first positions (SEO). Only few DMOs are shown in the first positions when searching by keywords (city name, region name). To the 5th place (places 1–5 we have chosen to be a suitable comparison placement in search results because most of the standard size monitors show the first 5 places at once, without having the user scroll the page down) there were only 9, most appeared at the bottom location. Nearly half of DMOs appeared on the second or third party in the search engine, which reduces the reach of websites to visitors of the destinations, as most of the users do not even open the second or the third page of the search engine.

Up to 90% of users connect to websites via mobile phones, so a responsive design is important, but was used only by 16 websites (out of 34).

In order for a potential visitor to decide to visit a destination, not just a verbal description of the attractions is sufficient, he also needs to see them in the photos that make him want to visit the destination. The photos, published on the DMOs website, mostly met the set criteria, but there were pages that lacked descriptions of the photographs, a large amount of unstable and low-quality photos were available on the page. Average rating of photos reached 1.61 points out of 3 possible.

Not only current photos, but also direct webcasting can help the potential visitor to communicate the real situation in the destination and encourage him for visiting. Whilst abroad it is a common practice, only four local organizations in Slovakia offer such opportunities to visitors.

Each website has many subpages and users do not like to spend their time searching for information. Therefore it is practical to search directly on the site. The search window have 20 out of 34 DMOs.

It is desirable that the websites contain not only the list of accommodation and hospitality facilities in the destination, but also their search according to the specified criteria, respectively direct booking possibility. Accommodation search allow nineteen DMOs, but directly bookable accommodation is only available on eight websites. Trend abroad is also booking other services on website (e.g. tickets for organized events). Only internet sites of two organizations offered this option.

The map is a basic navigation element that allows orientation in the destination. Traditional paper maps use the visitors less often because of the onset of information technologies. Greater possibilities offer maps in electronic form, which can also be viewed on the website. This option is used by 25 out of 34 DMOs. Most DMOs use simple Google's map application. More attractive are the interactive maps available on the websites of eight DMOs. On these maps, a visitors can optionally view layers and customize the map according to what they are specifically looking for (e.g. view only museums, accommodation, castles, attractions, etc.), mark any pictogram and show details of the attractivities or tourism facilities. On the map like mentioned about also tourist trails can be preselected.

Primary supply in the destination also includes organized events. Because they can also be held at different times in one time horizon, it is advisable to post them into the calendar on the DMO page. Calendar is used by 23 DMOs, but six of them do not have an actual calendar.

Promotional materials in electronic form can also be placed on the website, which is used by nine DMOs. The visitor can download them and conveniently view them on his mobile device.

By deciding for visiting the destination plays an important role the weather. Therefore it is desirable to place an application on the internet site, which shows the destination current weather or the weather forecast for few days in advance, respectively refers to the weather service provider’s website for more detailed information on its development. This application is used by 16 DMOs.

To the transparency of the site contributes the publication of brief relevant text in a transparent form. To get detailed information, it’s a good idea to place a link to a website, for example on accommodation facilities, hospitality facilities, organized events, attractions and tourist centers, towns and municipalities, regional DMOs and other entities involved in the development of tourism in the destination. Such links are used by 23 DMOs.

It is also important to link the website with social networks. In addition to publishing on the social networks, the fan page serves, in particular, for active contact with visitors. The connection uses 20 DMOs. In all cases, this means link to Facebook, in small numbers they use the links to Instagram, Youtube, Google+.

Social networks also include the option to “send or recommend a friend”, where users can use a button to send a link to a specific website that they are interested in, send to their friends via e-mail, or share on their social network profiles. This option is used by 12 DMOs.

Eighteen DMOs have the opportunity to provide feedback on their website using the contact form.

A process that allows an immediate reaction is live chat and is used by some foreign destinations and DMOs. There is no DMO in Slovakia using live chat on its website.

About half of the DMOs that use communication via their own website (17 DMOs) also try to communicate with foreign visitors and have a website in multiple language mutations.

Social networks. We have preferentially researched the activity on the Facebook social network, which is the most widely used in Slovakia and also in the world. The fan page was created by the most DMOs (26). There are 6 DMOs active on the Instagram social network, and only one DMO created its profile on Google+ and Twitter. From 23 DMOs which have created a social profile on Facebook, only 21 DMOs actively communicated during followed period. The facebook pages ranged from 100 to almost 10,000 fans. The average number of fans was 3153. However, a more reliable marker is the median (1593). The number and type of the contributions added varied. The most common DMOs added photos (34.96%), contributions to organized events (32.25%) and external links to other media, recalling news from the region (27.31%). DMOs added pure text status to their sites at least (5.48%). We also followed the aggregate number of post interactions added to the DMOs fan pages. Most fans (54.12%) responded to the added photos from the destination.

Table 5 DMOs allocation according to the research results

Category name	Destination management organizations
Tigers	Banská Štiavnica Tourism, REGION LIPTOV, Vysoké Tatry Region, Trnava Tourism, Bratislava Tourist Board, Central Slovakia Tourist Board
Dolphins	Kysuce tourist board, Rajecká dolina, SEVERNÝ SPIŠ—PIENINY, TATRY—SPIŠ—PIENINY, Slovenský Raj & Spiš, KOŠICE-Tourism
Turtles	Klaster Orava, REZORT PIEŠŤANY, Region Horná Nitra-Bojnice, Malá Fatra, Horný Zemplín a Horný Šariš, Dudince Tourism, Nitra tourist board, TURIEC—KREMNICKO, Regional Tourism Organisation Záhorie, PODUNAJSKO, "The Small Carpathians", Regional Tourism Association Tekov
Snails	Senec Region, Žitný ostrov, Nízke Tatry Juh, Horné Považie Tourist Association, Region Gron, TOUR NOVOHRAD AND PODPOĽANIE, Vysoké Tatry—Foothills, Zemplínska, Trenčín-Country-Surrounding, Regional Tourism Organisation Trenčianske Teplice
Dead bugs	"Šariš"—BARDEJOV, Šariš Region

Source Own elaboration, 2018

Mobile applications. Mobile apps have the advantage of accessing information offline as well, without connecting to the internet. The advantage of mobile phones is also GPS, which combined with an offline map in the app can serve as a good navigation system. The possibility to download the mobile application is offered by 5 DMOs, while all of apps are available in versions for both Android and iOS operating systems (one for Windows). However, applications were not functional in all organizations.

According to the specific activity of individual DMOs and the results achieved in internet marketing communication, we divided DMOs into five groups (Table 5).

5 Discussions

The main objectives of DMOs in Slovakia are to a large extent consistent with the objectives highlighted by the destination management theory (Granville et al. 2016; Hristov and Ramkissoon 2016; Reitsamer et al. 2016 and others) and good practice of DMOs in countries with developed tourism. These include, in particular, the promotion of sustainable tourism development in the destination, an increase in the number of overnight stays, and an increase in the average length of visitors' stay, the creation of a recognizable brand and the identity of destination sites, targeted and effective promotion (the register of existing organizations available on the website of Ministry of Transport and Construction of the Slovak Republic and the websites of existing organizations, 2018).

The results of existing surveys in Slovakia show that marketing of DMOs is provided under their own direction (86%) or through an external organization (14%). Of the total expenditures of DMOs, marketing expenditures create 43.4% share in Slovakia (Pěč 2012).

Electronic marketing and, in particular, the dynamic and interactive website of the destination and its active presentation on social networks are one of the key prerequisites for success on the crowded destinations market. The internet has an extraordinary importance in the tourism sector, as the visitor can not test the services in advance, and the information gained from the Internet is crucial in the decision-making process.

DMOs should focus on the content and design of their website in their online marketing communication on the internet. It should include up-to-date, relevant, and trusted information about the destination, calendar of organized events, high-quality and representative photos and videos, as well as webcam images that document real-life in the destination at a specific time including the weather. An indispensable part of the destination's website should be a map, ideally interactive, into which a visitor can interfere and choose the desired content. For the web site is an extremely important responsive design and mobile app that offers a scaled version of the website. For foreign visitors the website should be fully available in foreign language mutations.

6 Implementations

The survey results are implementable on all DMOs in Slovakia, covering the whole territory of the country and all tourism regions. Suggestions for better use of internet marketing communication tools are applicable in Slovakia and in the countries with a similar level of tourism development. They expect to keep track of new information and apply current trends in marketing communication into practice.

7 Limitations

Since internet marketing is developing very quickly, results of individual DMOs may change at any time and are valid during the research period (to January 2018).

8 Conclusions

The Internet as a communication medium, the advantage of which is also the speed of information transfer, plays an extremely important role in tourism. The marketing communication of the destinations for which local destination management organizations are responsible should therefore pay attention to the use of the internet.

The aim of the article was to examine the internet marketing communication of local destination management organizations and to identify the possibilities of its improvement on the basis of the results of the research. We have divided the organizations into five groups according to the results of the primary research. In the strongest group of Tigers, there are currently 6 DMOs (which is only 17% of the total number of DMOs in Slovakia). These DMOs do not need any interventions to their internet marketing communication processes. The Dolphins group consists also of 6 DMOs (17% of the total number of DMOs in Slovakia). There are 12 DMOs (33%) in the Turtles group, 10 DMOs now belong to the group Snails (28%), and 2 organizations are included in the last group of Dead Bugs (5%), because they do not use internet marketing communication at all. Nearly inactive and completely inactive organizations need to develop the concept of internet marketing communications from the start.

Overall, less than 20% of researched organizations use the available tools efficiently and effective and up to 33% of the total number of organizations are almost or totally inactive in internet marketing communication.

In the article we have outlined the failings that need to be removed in the case of more destination management organizations.

The advantage of the internet and its impact in the field of marketing communication is its comparatively low price compared to traditional communication tools. In addition, it is a chance for all local destination management organizations to reach a particularly rapid development in this area. However, the awareness of all subjects who are trying to assert a competitive struggle is constantly growing and therefore, in the context of time, the situation (in the positive way) may be diametrically different.

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Chapter 23
Online Hotel Customer's Perceived Service Quality and Purchase Intentions

Anna Kourtesopoulou and John Kehagias

Abstract Background: Nowadays, a growing number of people trust the Internet to buy new products and services as they are able to conduct online research before they make a purchase and find the best deals. The challenge for hotel businesses is the ensureness of an effective online service environment to meet customer needs and expectations, since they are more informed, connected and demanding. The main goal of this study is to investigate the preferences of online hotel customers on service quality and their purchase intentions. Methods: The sample consisted of 540 internet users who had visited a hotel webpage in less than one year, 260 of whom were men (48%) and 280 women (52%), and their age ranged from 20 to 64 years old (M = 35, SD = 9.9). Data collection was performed through an electronic questionnaire, which was based on WebQual of Loiacono et al. (2007). The results: According to the responses of online users, significant differences were identified between browsers and purchasers in the quality dimensions of usefulness and complementary relationship, as well as in purchase intentions. The reason of hotel booking and the source of information also significantly influenced the perceived quality of customers. Greater level of satisfaction was found in high experienced online purchasers who conduct frequently online purchases. Correspondingly, purchase intentions were found to be affected only by the frequency of online purchases. Finally, a positive strong correlation was found between the overall perceived quality and purchase intentions. Conclusions: The results of this study are considered important for the hotel industry, providing valuable information about the particular needs and motives at a level of their quality preferences in an online hotel environment as well as their purchase intentions. Therefore, hotels need to place their emphasis in the customization of their websites, in order to provide high quality customer service experience.

A. Kourtesopoulou (✉)
Faculty of Economics and Management, Open University of Cyprus,
Latsia, Cyprus
e-mail: akourtes@hotmail.com

J. Kehagias
Department of Sport Organization and Management,
University of Peloponnese, Sparta, Greece

V. Katsoni and M. Segarra-Oña (eds.), *Smart Tourism as a Driver for Culture and Sustainability*, Springer Proceedings in Business and Economics,
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1 Introduction

Now days, technology plays a significant role in people's life and is an essential part which affects our behavior in certain degree. The web provides wide spread communication beyond daily interaction by online communication, either through an image or sound or exchanging comments and experiences with group members with common interests all over the world. According to recommendations made by the European Travel Commission (ETC) and World Tourism Organization (UNWTO), for a business to be able to succeed in this expanded online society, it will have to invest in research and intelligence in order to fully understand the market environment and its structure, for gaining a competitive advantage (ETC and UNWTO 2014).

Therefore, in tourism industry, a business, whether it is a hotel or a tourist agency, aims to improve its operational excellence to enhance customer service by putting greater focus on technology. Recognizing, the extended consumer preferences for online services, the leading hotels of the world, such as Hilton, began to adjust their websites in order to be compatible with mobile phones, followed by the creation of specialized mobile applications for the hotel services (Chen et al. 2012; Chen et al. 2016; Conyette 2015).

More than ever, tourism and hospitality businesses develop effective websites by providing visitors updated information about their products and services, as well as personalized customer experience. A plethora of studies underlines the increasingly important role of ensuring a consumer-friendly online environment. In particular, in tourism industry, the value of perceived quality is a key driver of purchase intention, given that satisfied customers display higher levels of loyalty (Kim et al. 2011; Zehir et al. 2014), high intensity of purchasing and willingness to pay more for the provided services (Bai et al. 2008; Baker and Crompton 2000; Bolton et al. 2000; Jeong 2002; Kim et al. 2006; Wong and Law 2005).

Internet is one of the most important interactive tools with a significant impact on three prime pillars of customer relationship management and in other words the level of customer satisfaction, trust and commitment. According to the existing bibliography, a number of specific web feature as the constant availability of information, the opportunities for interaction, the easy access to information, the degree of personalization, but also the entire communication and transaction system, play an important role in the relations between the hotel and their customers. Several studies conclude that information provided by a hotel website seems to be one of the main success factors (Herrero and Martin 2012; Leung et al. 2016; Liu and Zhang 2014; Jeong 2004; Jeong and Gergoire 2003; Polites et al. 2012; Wang and Wang 2010; Wong et al. 2015; Zafiropoulos and Vrana 2006). Another frequent quality dimension relating to ease of use covers not only the level of readiness and understanding of the given information (Bai et al. 2008; Jeong 2004; Jeong and Gergoire 2003), but also the importance of ease of operation and navigation (Herrero and Martin 2012; Kim et al. 2011; Jeong and Lambert 2001; Wang et al. 2015).

An equivalent significant dimension of perceived quality is the usefulness, which is the perception of a customer in carrying out transactions online. Another critical component of usefulness is also the degree of the adaptability of a hotel website to meet the consumer's functional task needs expected response times (Panagopoulos et al. 2011; Polites et al. 2012; Qi et al. 2009; Wang and Wang 2010; Yeung and Law 2004; 2006) and gain the consumer's trust (Han and Lee 2011; Kim et al. 2013; Lee et al. 2013; Qi et al. 2013). Furthermore, there is a growing body of research which indicates the importance of the dimension related to entertainment value. A hotel website must be visually appealing, innovative and emotionally appealing (Bilgihan and Bujisic 2015; Grüter et al. 2013; Kim and Mattila 2011; Law and Bai 2008; Lwin et al. 2014; Qi 2016; Qi et al. 2009). Lastly, it is also supported that the complementary relationship is a critical quality factor in the satisfaction level of a hotel website customers. This dimension is related to the consistent image of the hotel, the perceived online completeness and relative advantage (Bauer and Scharl 2000; Loiacono et al. 2007).

In terms of the hotel customer view, specific critical factors ensure the quality of the offered services in an online environment. Results of a systematic review conducted by Kourtesopoulou et al. (2018) indicated that the first most important one, was the information adequacy, followed by the degree of trust and security that the consumer perceived through electronic transactions with a hotel. The third fundamental quality aspect, was related to the level of ease of use, the degree to which a user believes that the text and the navigation is easy to understand. Equally considerable arose the utility factor, which is the way the user perceived that this particular webpage responded to their visiting needs. Furthermore, website visual appeal, includes various entertainment elements, such as video and pictures, was also of critical importance followed by the different communication approaches and the interaction/personalization through social media, membership pages, electronic guest log, chat options, and customer service line.

An extensive range of models and theories have been developed to investigate and evaluate the quality dimensions which are considered important for the level of customer satisfaction in an electronic business environment. The most representative models are: (1) the E-QUAL (Kaynama and Black 2000) including the following quality dimensions: Content and purpose, accessibility, navigability, design and presentation, responsiveness, background, (2) the SITEQUAL (Yoo and Donthu 2001) including: ease of use, aesthetic design, processing speed, interactive responsiveness, (3) the WebQual (Barnes and Vidgen 2001) including: Tangibles, reliability, responsiveness, assurance, empathy, (4) the E-SERVQUAL (Zeithaml et al. 2002) including: Efficiency, system availability, fulfillment, privacy, (5) the ETAILQ (Wolfinbarger and Gilly 2003) including: Web site design, reliability, privacy/ security, customer service and (6) WebQual (Loiacono et al. 2007) including: information/task, tailored information, trust, responsiveness, ease of understanding, intuitive operation, visual appeal, innovativeness, emotional appeal, consistent image, on-line completeness and relative advantage.

Consider the digital revolution in the travel industry, in order to remain competitive, hotels must be flexible and forward thinking in their digital approach. At the same time, the contribution of OTAs to hotel sales have continued to increase, making up 12% of all reservations, as hotel customers seemed to prefer the OTA booking channel. It is critical for hotels to take back control of their client acquisition flow by leveraging their online environment being user friendly and response effectively to their expectations. The findings of this study will contribute in the existing literature which is limited, by offering significant information on hotel customers digital needs and quality expectations. Furthermore, by identifying the most preferred quality elements of an online environment this study is expected to predict in some degree the purchase intentions of hotel customers.

2 Objectives

The special focus of this study is to investigate the online preferences of hotel customers on service quality and their purchase intentions. Initially, it attempts to answer the following research questions: (1) Which are the online needs and preferences of browsers and purchasers, (2) What attributes determine the perceived quality of online Hotel's services; (3) Are perceived quality or/and purchase intentions being affected by demographic or internet use profile variables; (4) Is there a positive relationship between perceived quality and purchase intention.

3 Methods

3.1 Sampling

For limiting the sample frame, the questionnaire was distributed via various Greek tourism websites, portals, blogs and Facebook groups of interest in travel and tourism. More than, 800 questionnaires were collected, however, after a careful observation, those that contained invalid information or incomplete answers were removed. The sample therefore obtained 540 (82% response rate) web users who had visited a hotel website within the duration of one year, either to search for information or/and to make an online reservation. In total 280 women (52%) and 260 men (48%) were studied, with their age varied between 20–64 years old (M = 35).

3.2 Questionnaire

For the purpose of this study an adapted version of WebQual questionnaire, was used (developed by Loiacono et al. 2007) focusing on web site quality from the customer perspective. The first part of the questionnaire included questions in relation to: (a) demographic characteristics of the respondents such as: gender, age, educational background, marital status, vocational status, employment sector and income; and (b) internet user profile, including: total years of internet use, total years of online purchasing, frequency of online purchasing and annual amount of money spent on online purchases. The second part of the questionnaire included 22 questions in relation to quality factors influencing customer satisfaction and purchase intentions. More specific this questionnaire focus on four quality factors: usefulness (6-items); ease of use (4-items); entertainment (4-items); complimentary relationship (5-items). As well as, on the intent to reuse the website (3-items). Responders were asked to rate the extent to which they agree or disagree with each attribute using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

The content validity of the questionnaire was determined by a panel of experts which consisted of five academics and practitioners in the fields of tourism and hospitality management and tourism and hospitality marketing. The cronbach α coefficient of total scale was found to be 0.911.

3.3 Procedure

The data were collected during 2017 (December-April) through a web-based questionnaire. The survey link was sent through Lime survey which is an open-source, secure software survey tool. The filling time of the research questionnaire was designed as to be within 5–10 min. The participation in the survey was voluntary, as well as anonymity and confidentiality of their answers were ensured, since there was nothing that could identify them.

3.4 Data Analysis

Data were analyzed using the Statistical Package of Social Science (SPSS) version 23.0 software. In the descriptive section of the results means and standard deviations are presented for each of the quality factors measured. In the inferential statistics section all the research questions are tested. In order to check whether the collected data followed the assumption of parametric tests, an explanatory analysis was performed. The assumption of normality was examined using the Kolmogorov-Smirnov test. Normal probability plots and the Kolmogorov-Smirnov test indicated serious deviations of normality. Since the normality assumption was not satisfactory, non-parametric analysis of Mann-Whitney and Kruskal-Wallis were performed for the analysis of data. In statistical analyses median (Mdn) and the estimation of effect size (r), two different calculation formula were used for the estimation of r. In Mann-Whitney test r was calculated using the following formula $r = Z/\sqrt{N}$, and in Kruskal-Wallis through the η^2_p. Lastly, to determine if there was a significant correlation between the overall perceived quality and purchase intentions Spearman correlation analysis was used. Statistical significance for all measures were set at the .05 level of confidence.

4 Results

4.1 Demographic Data

The final sample consisted of 540 (82% RR) Greek customers who had visited a hotel webpage within the last year, either to search for information or to make an online booking. There were slightly more women (52%) than men (48%), ranged in age from 20 to 64 years old (M = 35, SD = 9.9) years. Regarding their educational background, the majority (46.7%) of the participants were graduates (University = 208, Technological Educational Institutions = 44), and 28.5% were holder of postgraduate degree (MSc = 136, PhD = 18). More than half of the sample was single (57%), with a greater proportion of 71,6% being employed mainly in the private sector (57.4%) and in public sector (36.9%) with an annual salary of 1001 to 2000 euro (37.4%).

4.2 Internet Use Profile

In terms of the Internet use, most participants (51.7%) claim to be Internet users from 7 to 13 years. According to their carrying online purchases 40.9% claim that they had an experience from 3–6 years. The amount of money they spend annually for online purchases, the majority (34.6%) fall into the category 101 to 500 euro.

4.3 User Profile of Evaluated Website

The greatest part of survey participants (23.1%) had visited the specific hotel website within the last week and in smaller proportion (20.7%) within the previous month. Among the main reasons for visiting the website, was to obtain information about the hotel and the surrounding area (26.3%), online booking (24.3%) and check availability (17.4%). Most participants (75.7%) had made a reservation in the specific hotel either for vacation (61.3%) or for professional purposes (20%) or for recreation (10.2%). Regarding the customer's source of information, the majority was informed of the particular hotel from a friend/family (n = 163), from social media (n = 111) and from other website (n = 85). Among the total number of the evaluated hotels, a proportion of 52.3% belong to the category of 2 and 3- star hotel, 28.7% were 4-star hotels and the remaining 19% were 5-star hotels. In terms of the ownership structure, the largest part of the hotels were private (70%) compared to chain hotels (30%).

4.4 Exploring the Different Quality Needs Between Browsers and Purchasers

The responses made by browsers-purchasers according their satisfaction level of online service quality, showed that they were satisfied to a great degree (M = 3.93, SD = .51). Since research evidence (Law and Bai 2008; Rong et al. 2009; Yang et al. 2004) suggests that there are important differences in perceived quality between browsers and purchasers, it was deemed appropriate to present the results by separating the responses of these two groups of users. Analyzing the online needs of customers, a Mann-Whitney test indicated that the perception of quality of a hotel website was greater for browsers than for purchasers in the following two factors: usefulness (U = 21.96, p = .002, r = .13) and complementary relationship (U = 23.23, p = .021, r = .09), as well as in their intent to reuse the website (U = 23.11, p = .016, r = .10). Table 1 shows the Median distribution of perceived quality factors and purchase intentions on the part of browsers and purchasers.

With respect to usefulness factor, purchases are given prime gravity to the accurate information and safe transactions through their shopping experience. Respectively, browsers think that the most important feature is the quick response of the website and the accurate information. In the supplementary relationship factor, both groups classify the potential of online transactions as the most critical

Table 1 Medians of web quality & purchase intentions scores per group of users

	Mdn Browsers (n = 131)	Mdn purchasers (n = 409)	Sig (2-tailed)
Usefulness	4.33	4.00	.002**
Ease of Use	4.00	4.25	.216
Entertainment	3.75	3.75	.320
Complementary relationship	3.80	3.60	.021*
Intent to reuse the website	4.33	4.00	.016*

Mann-Whitney U test **p* < .05 level, ***p* < .01 level dimension of e-service quality, following the online completeness of all customer business with the hotel. With reference to purchase intentions, both groups appear willing to a great degree to recommend the specific hotel website to a friend and reuse it.

Analyzing the impact of the reason of hotel booking, a Kruskal-Wallis test indicated that the perception of quality was greater for customers that had booked a hotel for vacations than those had booked for professional purposes in the following dimensions: entertainment $x^2(3) = 14.76$, $p = .002$, $\eta_P^2 = .029$), complementary relationship $x^2(3) = 12.40$, $p = .006$, $\eta_P^2 = .022$ and total perceived quality of web site $x^2(3) = 10.16$, $p = .017$, $\eta_P^2 = .016$.

A significant role in perceived quality seemed to play also the source of information on the existence of the website. Specifically, a Kruskal-Wallis test indicated that the perception of website quality was greater for customers that were informed for hotel website through either brochures or tourist agencies, than those informed through other website in the dimension of complementary relationship $x^2(5) = 12.29$, $p = .031$, $\eta_P^2 = .020$. Furthermore, those who were notified from a friend or family environment had a greater total perception of website quality than those that were informed from another website $x^2(5) = 11.22$, $p = .047$, $\eta_P^2 = .016$.

4.5 Exploring the Different Quality Needs Based on Demographic Characteristics

From the total number of demographic characteristics only gender and educational level seemed to differentiate the perceived website quality of hotel customers. Analytically, Mann-Whitney test indicated that the perception of online service quality was greater for female than male in all dimensions: usefulness ($U = 40.20$, $p = .036$, $r = .90$), complementary relationship ($U = 41.60$, $p = .004$, $r = 1.24$), ease of use ($U = 43.40$, $p = .00$, $r = 1.67$), entertainment ($U = 41.60$, $p = .004$, $r = 1.24$) and total perceived quality ($U = 42.80$, $p = .000$, $r = 1.51$). In relation to educational level Kruskal-Wallis test indicated that the perception of quality of website was greater for High school graduate/post high school studies than Postgraduate studies (Master/PhD) in the dimension of complementary relationship $x^2(2) = 9.96$, $p = .007$, $\eta_P^2 = .016$. Table 2 shows the Median distribution of perceived quality factors and purchase intentions based demographic characteristics

4.6 Exploring the Different Quality Needs Based on Internet Use Profile

From the total number of Internet use characteristics, only the previous online purchase experience, and the frequency of online purchases seemed to differentiate

Table 2 Medians of web quality & purchase intentions scores per demographic characteristics

Web quality dimensions	Mdn female (n = 280)	Mdn male (n = 260)	Sig (2-tailed)	Mdn high school graduate/post high school studies (n = 134)	Mdn postgraduate studies (Master/PhD) (n = 154)	Sig
Usefulness	4.17	4.00	.036*	4.17	4.17	.27
Ease of use	4.25	4.00	.00**	4.25	4.00	.54
Entertainment	4.00	3.75	.004*	4.00	3.75	.42
Complementary relationship	3.80	3.60	.004*	3.8	3.60	.007*
Intent to reuse the website	4.33	4.00	.086	4.00	4.00	.41
Total perceived quality	3.99	3.85	.000***	4.01	3.91	.32

Mann-Whitney U test, Kruskal-Wallis test **p* < .05 level, ***p* <.01 level, ****p* < .001 level

the perceived quality of the hotel's website. Analytically, Kruskal-Wallis test indicated that the perception of ease of use was greater for those who had 7–11 years of online purchase experience (Mdn = 4.00)than those who had less than 2 years (Mdn = 4.37), $x^2(3) = 8.96$, $p = .029$, $\eta_P^2 = .009$. In relation to the frequency of online purchase, Kruskal-Wallis test revealed that those customers that make 2–5 (Mdn = 4.00) or more than 20 (Mdn = 4.33) online purchases annually had greater intent to reuse the website that those that make less than 2 online purchases annually (Mdn = 3.83), $x^2(4) = 13.71$, $p = .008$, $\eta_P^2 = .005$.

4.7 Correlation Between the Overall Perceived Quality and Purchase Intentions

Finally, in an attempt to investigate if there is a correlation between the overall perceived quality and purchase intentions, Spearman correlation coefficient was used. From the result of the analysis, it was found that there is a powerful positive correlation $r^{rho}(540) = .638$, $p = .000$ between the total perceived quality and purchase intentions. Therefore the greater the degree of perceived quality, the greater the hotel customer intentions to reuse, rebook and recommend this hotel Website to a friend.

5 Discussion

The aim of this study was to investigate the preferences of online hotel customers on service quality and their purchase intentions. Recognizing Internet as one of the most interactive marketing tools with a significant impact on customer satisfaction, trust and loyalty level, the browsers' and purchasers' network needs are presented. From the analysis of results major differences were found between the two different groups of online users. In particular, browsers seemed to be more concerned about the dimensions of ease of use, the complementary relationship as well as be more willing to reuse the hotel website. In terms of purchasers, considered as the most determinant factor of quality the usefulness of a hotel website, pointed out the adequacy of information and payment security. Respectively, browsers appeared to apply emphasis on the ease of use of a website, by mentioning as the most important online characteristics the content understanding and the level of website operation and navigation. Similar results are supported by previous studies (Herrero and Martin 2012; Jeong 2004; Kim et al. 2006; Kim and Mattila 2011; Panagopoulos et al. 2011) with the most distinguished elements being the ease of documentation understanding and the user's navigation in the web site environment.

The highest importance of information quality aspect, it is supported in the existing bibliography with a rich quantity of research (Bai et al. 2008; Herrero and Martin 2012; Jeong 2004; Jeong and Gergoire 2003; Polites et al. 2012; Wang and Wang 2010, Wong and Law 2005) claiming that each hotel website is required to have sufficient information on accommodation, offered services, online transactions, and the surrounding area (e.g. site seeing). Furthermore, in the bibliography, payment security is highlighted as the second one in terms of hierarchy (Kim et al. 2013; Kourtesopoulou et al. 2018; Qi et al. 2013; Wang et al. 2015), meaning the degree of trust and security that the customer perceives through online transactions with one hotel. Therefore, it became apparent that customer's online shopping experience is likely to be influenced by the level of perceived trust and security.

Regarding the factor of entertainment, both groups of online users rank as the most important element the pleasant website presentation and the gained sense of pleasure. Similar results are reported in the existing literature, for the role of aesthetic website presentation and various entertainment elements available, such as video, virtual tours, etc. (Bilgihan and Bujisic 2015; Grüter et al. 2013; Kim and Mattila 2011; Lwin et al. 2014; Law and Bai 2008; Qi 2016; Qi et al. 2009).

For the fourth factor of complementary relationships, both browsers and purchasers classify the online transactions ability as the most important characteristic of hotel website, followed by online transaction's completion and the relative advantage of using the website to complete all the hotel services. Researchers agree that there is a need of complementary relations through an individualized treatment. For example, Bauer and Scharl (2000) reported that the existence of integrated communication and ease of carrying out transaction play an important role in the business relationship with customers. This means that within a hotel website, products and service should be designed in accordance with customers' needs, taking into consideration their preferences and expectations, and provide high-personalized services that are tailored to meet their needs.

The investigation of the effect of internet use profile variables in the perceived quality and purchase intentions revealed significant differences in relation to the reason of reservation, with holidaymakers being more satisfied with entertainment and complementary relationships elements of a hotel website than those who had made a reservation for business reasons. Correspondingly, online users who had booked for vacation reasons showed significantly higher levels of satisfaction in overall perceived quality. Similarly, significant differences were identified based on previous online shopping experience, with the highly experienced online purchasers being more satisfied with the ease of use elements of a hotel website and being able to recommend the website to others and revisit it, either to search for information or make a hotel reservation. Also, the source of information seemed to play equally a key role in customer's perceived quality, referring to the complementary relationship dimension and the overall quality of a website. In terms of demographic characteristics, there were significant differences among the different educational background categories. In particular, graduates from high school or post high school studies seemed to appreciate in a greater level the complementary relationships through an online hotel environment, compared with the postgraduates.

Finally, it was examined whether there is a correlation between the overall perceived quality and the purchase intentions of Greek hotel customers. The results supported a strong positive correlation, meaning that as the degree of perceived quality increases, the customer is more willing to reuse the same hotel website either to search for information or to make a reservation. Respectively research findings from Greece (Polites et al. 2012) but also in the international field (Bai et al. 2008; Bolton et al. 2000; Lee et al. 2013; Wang et al. 2015; Wong and Law 2005) argue that the perceived quality of services is largely related to communication behavior towards other consumers and their purchase intentions. In particular, it is stated that when customers realize that the service provided is of a high qualitative value in terms of the money they are willing to spend on, then they give it a 'positive value' which in turn increases the degree of customer loyalty by exhibits repeat purchasing behavior from the same service provider. This finding has also been confirmed in the tourism industry, with Baker and Crompton (2000) claiming that the value of perceived quality is great, as satisfied customers exhibit greater levels of loyalty, increased purchase intentions, and are equally willing to pay more money for services offered.

5.1 Originality/Value

Summarizing the main points of this study, it is necessary for hotels to understand, that websites are an important marketing tool in the hands of businesses, giving them the opportunity to identify the needs of their customers and also to influence their purchase intentions. In turn, the quality of webpages is an important factor in the survival and the success of the business, and it has stimulated research interest. Exploring the consumer's intentions and their level of satisfaction, in this case the hotel market, a great level of the consumer behavior could be predicted, drawing important information about the different customer online needs and expectations based on demographic and use of Internet profile. Taking into account the online user's preferences, a hotel would be able to develop an appropriate customer strategy either of retaining existing customers by putting a lot of effort into campaigns and services or of creating a demand for its services by new promotional approaches and creating high-personalized services.

5.2 Implications

The results of this study are important for the hotel industry, providing valuable information on the particular needs of the online users at the level of their perceived quality and purchase intentions. Thus, on behalf of hotel business is required to draw on and evaluate information on customer needs and purchase intentions, beyond the degree of satisfaction with the perceived quality such as service preferences, travel frequency, travel motives and purchase preferences. a hotel company is obliged to know the total value of its customers through their habits. Internet has evolved to a great extent from a static reading and writing platform, in a social web of interaction. In order for a hotel to be able to succeed in this broadly networked society, research and intelligence should be provided in order to understand in depth the market environment and its structure and gain a competitive edge. Therefore, it should aim to improve its operations, but also to satisfy its customers, constantly investing in technology. Websites are an important marketing tool in the hands of hotels, giving them the opportunity to meet the needs of their customers and also to influence their buying intentions. In turn, Hotels need to provide a superior website high quality experience as a key strategy for their survival and success.

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Chapter 24
The Impact of Online Travel Agencies Web Service Quality on Customer Satisfaction and Purchase Intentions

Anna Kourtesopoulou, Sofia-Danai Theodorou, Athanasios Kriemadis and Alkistis Papaioannou

Abstract Background: Recent technological innovations which adapted from tourism sector have a decisive impact on the traveler experience. The rapid growth of the Internet usage, confirms that websites consist a critical competitive resource for tourism firms. In this dynamic environment, it is important for online travel agencies to fully understand what aspects of the website affect the perceived quality and to provide web services that fulfil online consumers' needs. The main goal of the study was to investigate the effect of perceived quality on customers' overall satisfaction, and purchase intentions of online travel agency services. **Methods:** The sample consisted of 346 internet users who had visited an online travel agency in less than one year, 192 of whom were women (55.5%) and 154 men (44.5%), and their age ranged from 18 to 62, with the majority of participants belong to the age category of 18–25 years old (26.6%). Data collection was performed through an electronic questionnaire, which was based on WebQual of Loiacono et al. (2007). **The results:** Results indicated that among all the quality factors, the ease of understanding, response time, and the website intuitive operation (ease to use and navigation) emerged as the most important. Quality perception was significantly different in terms of gender, age and educational level. Also, the perceived quality needs and purchase intentions were different for browsers and purchasers. With regard to the Internet user profile, the annual amount spending on online booking, the reasons of booking and the reason of visiting the website, seemed to influence the perceived quality. Correspondingly, purchase intentions were found to be affected by the reasons of booking and the reason of visiting the website. Finally, a positive correlation was found between the overall perceived quality and purchase intentions. **Conclusions:** The results of this study are considered important for practitioners in the online travel sector, by identifying significant factors that affect online consumers' willingness to purchase and will also contribute to building the concept of online travel agency quality performance.

A. Kourtesopoulou (✉) · S.-D. Theodorou · A. Kriemadis · A. Papaioannou
Department of Sport Organization and Management, University of Peloponnese, Sparta, Greece
e-mail: akourtes@hotmail.com

V. Katsoni and M. Segarra-Oña (eds.), *Smart Tourism as a Driver for Culture and Sustainability*, Springer Proceedings in Business and Economics,
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JEL classification **L8 industry studies: services** (L83Sports • gambling • restaurants • recreation • tourism or/and L86 information and internet services • computer Software) · **Z3 tourism economics** (Z39 Other-e-commerce)

1 Introduction

Recently, the Internet has become one of the most critical technology assets by playing a vital and growing role in the travel industry and constituting the main source of travel information. According the survey of FortuneGreece (2016), in the expanded online market, more than 55% of the consumers make online purchases. E-business provides enterprises new opportunities and more efficient business transactions. Despite the promising potential of electronic commerce, such as reductions in business costs, the adoption of online purchasing is limited. Particularly, in Greece the proportion of consumers who purchased online is 10%, when the average for the rest of Europe is 49%. In addition, even though Greece has reached a high position in the global ranking of competitiveness (24th place), based on Travel & Tourism Competitiveness report (2017), there should be given high-priority to information and communication technologies (ICTs) improvements and increase investments, as it is only 51st place in the category of ICT readiness. It is therefore understood that there are clear advantages to expanding the use of the Internet by the tourist industry in Greece (Tourism Economics 2013).

The website of a tourist business constitutes the main channel of disseminating and communicating information about its products/ services. Various ways of linking travel businesses to their consumers are offered, such as social media, travel applications, search engines and booking platforms (Li and Bernoff 2011). The exploitation of new technological trends is seen as an imperative need in the tourism industry. Online travel agencies can optimize their business, improve their operations and make improvements in customer satisfaction and loyalty by investing in technology (Kordreras and Polymenidou 2011; Henriksson 2005; Stiakakis and Georgiadis 2011). Therefore, online travel agencies (OTAs) should be able to offer customers unique experiences through intelligent applications tailored to the needs and specific consumer profile (Werthner and Ricci 2004; Conyette 2014, 2015).

Specific features of the Internet such as the constant availability of information, opportunities for interaction, easy access to information, and the degree of personalization as well as integrated communication and transaction systems, play an important role in business relations with consumers (Bauer et al. 2002). A holistic approach to assess the perceived quality of online services, including the tourism industry, has been made by Loiacono et al. (2007). These researchers developed the model WebQual which consists of the following twelve core dimensions: information/task; tailored information; trust; responsiveness; ease of understanding; intuitive operation; visual appeal; innovativeness; emotional appeal; consistent image; on-line completeness; and relative advantage.

2 Perceived Quality of Online Travel Egencies Services

Online travel agencies cover a wide range of travel needs, providing travelers with the ability to explore, plan and book flights, hotels, transportation and other travel services. The use of the Internet offers a wide variety of possibilities and enhances the competitiveness of OTAs. It is interesting to present the specific factors that play a decisive role in shaping the perception of the quality of travel web sites. The E-QUAL which is a proposed model of Kaynama and Black (2000), offers factors that reflect on online travel agencies environment and includes the following quality dimensions: content and purpose; accessibility; navigability; design and presentation; responsiveness; and background.

In an attempt to investigate the online customer satisfaction and loyalty intention, Ho and Lee (2007) evaluated the dimensions of information quality, security, website functionality, customer relationships and responsiveness. Their e-travel quality service scale had a strong predictive capability in relation to online customer satisfaction and loyalty intention (Ho and Lee 2007). A similar study of Kim and Lee (2004) mentioned five quality dimensions: the structure and ease of use; the information provided; the degree of responsiveness and personalization; the reputation; the safety; and the utility level. Research results in Taiwan (Huang 2008), supported that e-quality as well trust might be considered as the most important antecedents to e-loyalty, where loyalty results in the increased transaction intentions of online travel browsers and purchasers. In addition, it suggested dimensions that ultimately influence customers' satisfaction such as: the perceived navigability; playfulness and personalization (Nusair and Kandampully 2008; Hsu et al. 2012); website interactivity; electronic customer voluntary performance; and inter-customer support (Sigala 2009).

It is recognized that the hierarchy of factors associated with perceived quality differs in a great level (Kim and Lee 2004; Wan 2002). Some authors recognized the significant impact of the information content to customers' satisfaction level and purchase intention (Liu and Zhang 2014). By contrast, other researchers suggested the positive influence of the dimension of ease of use in determining willingness to use, followed by information content, responsiveness, fulfillment, and security/privacy (Park et al. 2007). Website functionality also appeared to be the most powerful factor in predicting customer satisfaction, reuse/repurchase intention (Tsang et al. 2010) and perceived value. Helping users navigate their way is considered one of the most beneficiary ways for travel providers to add value (Bernado et al. 2012).

Recent technological innovations that adapted from the tourism sector, made the most difference in the traveler experience. The rapid growth of using the Internet for booking or even for seeking travel information, confirms that websites are a critical competitive resource for tourism firms. Also, the technology adoption is challenging the competition among the different channels of tourism providers. Comparing the customer service quality between hotel and OTA websites, there is research evidence that OTA is underperforming in terms of providing online service quality (Kim and Lee 2004; Liu and Zhang 2014; Nusair and Kandampully 2008).

2.1 *Factors Affecting Consumers Purchase Intentions*

The level of familiarity with the use of the Internet is considered the most significant factor that positively impact the online booking (Varma et al. (2000). Online consumers due to the internet usage for multiple activities, they are well familiar with the online environment and they behave different approach on searching relevant services information, and conducting comparative shopping and buying travel services. Through their expanded online experience, they value the Web's ability that saves them time for the cost saving capability (Conyette 2015).

Considering that there are different perceptions of quality among the e-consumers of travel websites, Law and Hsu (2006) suggested the distinction between browsers (lookers) and purchasers (buyers). Due to Rong et al. (2009) findings, online purchasers and browsers expressed different preferences in their perceptions of hotel website attributes. Notably, browsers were significantly less focused and motivated by the provided information in relation to transportation, main attractions and special events compared with purchasers. In a recent study of Law and Bai (2008) is further claimed that online purchasers of travel websites, perceived significantly higher than browsers the quality level of information related to purchasing and service/product given details.

Gender also seemed to play significant role in the context of purchase intentions. Findings across many studies provide support that male and female consumers significantly differ in terms of loyalty (Melnyk et al. 2009; Riedl et al. 2010). Additionally, women add more value and use discount coupons, check online benefits and cost-effectiveness (Kim 2009) more regular than men. Likewise, in relation to trust, women seemed to be more concerned with online privacy and security than men (Sebastianelli et al. 2008; Awad and Ragowsky 2008). Lastly, women exhibited slightly more emphasis on navigation functionality which seem to increase their level of trust compared with men (Kim et al. 2013).

The findings of this research study could provide valuable information on quality needs based on the customer's view. Further, this study would also expectedly heighten the awareness of the OTAs on quality performance, by identifying the particular needs and motivations of different groups of online users. Despite the growing importance of the Internet to travel industry, the existing literature focusing specifically on OTAscontains very limited information concerning the different customer needs in their quality perceptions and in their intentions to use OTAs for planning their next trip.

3 Objectives

The primary goal of the study was to examine the effect of perceived quality on customers' overall satisfaction, and purchase intentions of online travel agency services. To achieve this goal, the following four research questions were addressed in this investigation: (1) which are the browsers and purchasers online needs when they visit online travel agencies websites; (2) What attributes determine the perceived quality of online travel agencies from customer's perspective; (3) Are perceived quality or/and purchase intentions being affected by demographic or internet use profile variables; (4) Is there a positive relationship between perceived quality and purchase intention.

4 Methods

4.1 Sampling

The population selected was mainly undergraduate and postgraduate students of the University of Peloponnese, as well as members of various tourist portals and tourist interest groups on Facebook. A convenience sampling technique was used. A total of 500 responses were collected in the period from September 2018 to March 2018, from online users who had visited an OTA's website in less than a year, either to search for information or to make an online reservation. Finally, after removing any invalid responses, 346 responses (70% RR) were used for data analysis. The majority of the responders were female (n = 192) and belong to the age group of 18–25 (26.6%).

4.2 Questionnaire

For the purpose of this study a 22-item questionnaire, was used based on Loiacono et al. (2007) WebQual model, focusing on web site quality from the customer's perspective. The first part of the questionnaire included questions in relation to demographic characteristics of the respondents such as: gender; age; educational background; marital status; occupation status; work industry; and income. The second part consisted of questions related to internet user profile such as: total years of internet use; total years of online purchasing; average time spent on the internet; frequency of online purchasing; preferred categories of products/services that purchased online; the estimated annual amount of money spent on online purchases; and the reason of visiting the online travel agency. Its last part included 22 questions in relation to quality factors influencing online customer' satisfaction and purchase intentions. More specifically, this questionnaire focused on five quality factors: usefulness (6-items); ease of use (4-items); entertainment (4-items); complimentary relationship (5-items); and the intent to reuse the website (3-items). Responders were asked to rate the extent to which they agree or disagree with each attribute using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

The content validity of the questionnaire was determined by a panel of experts which consisted of five academics and practitioners in the fields of tourism management and tourism marketing. The cronbach α coefficient of total scale was found to be, 923.

4.3 Procedure

The data were gathered through an online questionnaire and the responders took 5–10 min on an average for its completion. Finally, the respondents' privacy and confidentiality were secured since the online survey did reveal the identity of any personal information such as name or email address.

4.4 Data Analysis

Data were analyzed using the Statistical Package of Social Science (SPSS) version 23.0 software. In the descriptive section of the results, means and standard deviations are presented for each of the quality factors measured. In the inferential statistics section all the research questions are tested. Data were also examined for normality, using normal probability plots and the Kolmogorov-Smirnov test. Since were indicated serious deviations of normality ($p < 0.05$), non-parametric statistical tests were performed. Differences in medians (Md) between two groups were analyzed with the Mann-Whitney U test and between three groups were analyzed with the Kruskal-Wallis test. Lastly, to determine the existence of significant correlation between the perceived quality and purchase intentions, the Spearman correlation analysis was used. The statistical significance of all measures was set at the 0.05 level of confidence.

5 Results

5.1 Demographic Data

The total sample of this study consisted of 346 Greek online browsers-purchasers of OTAs. Their age ranged from 18 to 62, with the majority of participants belong to the age category of 18–25 years old (26.6%). Regarding their educational level, the majority (46%) of the participants were university graduates, graduates of high school/postgraduate studies (28.6%), and the remaining 25.4% held a postgraduate diploma/doctorate. As for their marital status, the majority of the sample was single (70%). Regarding their employment status, 67.5% had a job and 32.5% were unemployed with this category includes mainly undergraduate students, retired persons and those taking care of children. The prevailing employment sector was the private (40.3%), followed by the self/paid (14.5%) and the public (12.7%), with the majority belong to the monthly income category ranging from 1001 to 2000 euros (36.7%).

5.2 Internet Use Profile

In terms of the Internet use, the majority (53.5%) of responders had 2 to 10 years of experience and less than a half of the responders (43.6%) access to the Internet for 2 to 5 h per day. Regarding their prior online purchase experience, 42% of the responders had up to 5 years, and a proportion of 20.2% spent annually a maximum of approximately 101 to 250 euros on online purchases.

A total of 24% had visited an OTA website in the last week. Among the main reasons for visiting the OTA's website, room reservation received 26,3% of the total responds, followed by information seeking about the hotel and the surrounding area (22%), and checking of available offers (21.4%). Among the twelve different OTAs that they had visited, Booking (n = 184) was the most frequently used, another 47 responders had visited the TripAdvisor, while 38 had visited the Airbnb. Some examples of other OTAs used where Lastminute, Kayak, Expedia and Hotels.gr. More than 90% of responders indicated that they had made an online booking in a hotel either for vacations (66.5%), either for business (14.2%) or recreation (9.2%).

5.3 Perceived Quality of OTA From a Customer Perspective

Referring to the perceived quality of OTAs, the participants ranked the ease of use as the most important factor (M = 4.21, SD = 0.64), followed by the complementary relationship (M = 4.15, SD = 0.68) and the usefulness (M = 4.12, SD = 0.59). Through the total 12 dimensions of online perceived quality the most

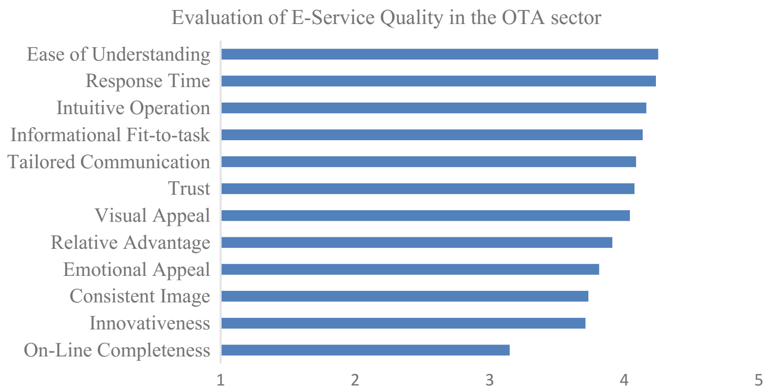

Fig. 1 Customers evaluation of e-service quality (Color figure online)

determined was the ease of understanding (M = 4.25, SD = 0.70), followed by the response time (M = 4.23, SD = 0.75) and the intuitive operation (M = 4.16, SD = 0.84). In relation to the purchase intentions of online browsers and purchasers results supported a high level of willingness to reuse OTA websites (M.O. = 4.15, SD = 0.68). The distribution of e-quality dimensions is presented in Fig. 1.

5.4 *Online Needs of Browsers and Purchasers*

Exploring the online needs of browsers and purchasers, a Mann-Whitney test indicated that the perception of quality of the website was greater for purchasers than for browsers in the following three dimensions: usefulness (U = 6.55, p = 0.004); complementary relationship (U = 6.55, p = 0.007); and intent to Reuse the Web Site (U = 6.32, p = 0.015). Table 1 shows the Median distribution of perceived quality factors on the part of browsers and purchasers (Table 1).

5.5 *Differences on E-Quality Evaluation by Demographic or Internet Use Profile*

From the demographic characteristics the gender, age and educational level seemed to differentiate the perceived website quality. Analytically, Mann-Whitney test indicated that the perception of the website quality was greater for female than male in the dimensions of quality based on: usefulness (U = 16.83, p = 0.026); ease of use (U = 18.65, p = 0.000); entertainment (U = 17.84, p = 0.001); complementary relationship (U = 17.01, p = 0.016); and not in purchase intentions. Table 2 shows the Median distribution of perceived quality factors based on gender.

Table 1 Medians of web quality scores per group

	Mdn browsers (n = 32)	*Mdn* purchasers (n = 314)	*Sig (2-tailed)*
Usefulness	3.75	4.17	0.004**
Ease of use	4.13	4.25	0.260
Entertainment	3.75	3.75	0.348
Complementary relationship	3.50	3.80	0.007**
Intent to reuse the web site	4.00	4.00	0.015*
Total perceived quality	3.82	4.00	0.030*

Mann-Whitney U test $p < 0.05$ level, ** $p < 0.01$ level*

Table 2 Medians of web quality scores per gender

	Mdn female (n = 154)	*Mdn* male (n = 192)	*Sig (2-tailed)*
Usefulness	4.17	4.00	0.026*
Ease of use	4.25	4.00	0.000***
Entertainment	4.00	3.75	0.001**
Complementary relationship	3.80	3.60	0.016*
Intent to reuse the web site	4.33	4.00	0.062
Total perceived quality	4.11	3.84	0.000***

*Mann-Whitney U test, * $p < 0.05$ level, ** $p < 0.01$ level, *** $p < 0.001$ level*

Regarding the age, Kruskal-Wallis test indicated that there was a significant difference in the medians in the dimension of complementary relationship $x^2(2) = 2.70$, $p = 0.002$, and referring to the educational level, there was a significant difference in the dimension of complementary relationship $x^2(2) = 0.28$, $p = 0.034$.

With reference to internet profile characteristics, differences were found in the annual amount of time spent on online bookings, the reasons of booking and the reason of visiting the website. More specifically, Kruskal-Wallis test indicated a significant effect of the annual amount of time spent on online booking only in the dimension of complementary relationship $x^2(7) = 12.30$, $p = 0.019$. Also, a significant effect of the reasons of booking was found in all quality dimensions such as: usefulness $x^2(3) = 14.35$, $p = 0.002$; ease of use $x^2(3) = 14.35$, $p = 0.002$; entertainment $x^2(3) = 23.08$, $p = 0.000$; complementary relationship $x^2(3) = 17.93$, $p = 0.000$; and in purchase intentions $x^2(3) = 11.96$, $p = 0.008$. Lastly, it was found a significant effect of the reason of visiting the website in the following 3 dimensions: usefulness $x^2(4) = 12.04$, $p = 0.017$; ease of use $x^2(4) = 10.50$, $p = 0.033$; and in purchase intentions $x^2(4) = 10.82$, $p = 0.029$.

5.6 Correlation Between the Overall Perceived Quality and Purchase Intentions

Finally, in an attempt to answer the fourth research question, whether the perceived quality is related with the purchase intentions of customers, Spearman correlation coefficient was used. From the results of the analysis, it was found a strong positive correlation rho (346) = 0.698, $p = 0.000$ between the overall perceived quality and purchase intentions. In other words, the customers who perceive a high level of quality in online services offered by an OTA appeared to have higher intentions to purchase.

6 Discussion

The main objective of the study was to investigate the effect of perceived quality on browsers' and purchaser's overall satisfaction, and purchase intentions of online travel agency services. Recognizing the significant role of customer satisfaction, all travel businesses should have a carefully considered customer strategy to ensure that their customers have a great experience, appreciate the overall quality, receive value and stay loyal. The OTA industry, are using the Internet which provides enterprises new opportunities and efficient operational transaction services. With the wide adoption of e-business in travel industry, the Internet has become an important travel service delivery channel, as almost 55% of customers make online purchases (FortuneGreece 2016; Li and Beroff 2011).

Considering the increasing importance of the Internet, the first research question investigated the needs of browsers and purchasers when they visit an OTA website. The analysis of the data confirmed the different perceptions regarding the quality of website between those users that visit an OTA to seek for information and those that make an online booking. Specifically, it was found that purchasers were more likely to be aware of the usefulness and the complementary relationship dimensions of an online travel environment and appeared to have higher purchase intentions. This finding not only supports previous research (Law and Hsu 2006; Rong et al. 2009; Law and Bai 2008), but also extends the body of Knowledge on perceived quality in an OTA context.

From the usefulness dimension perspective, OTAs should consider carefully the special needs and priorities based on the user profile and determine what online information consumers want (Werther and Ricci 2004), support consumer interaction via the website (Li and Bernoff 2011; Stiakakis and Georgiadis 2011), adopt and promote security and privacy policies and ensure sufficient response time of the given online information and transactions (Conyette 2015; Loiacono et al. 2007). In relation to the complementary relationship dimension, OTAs should support online business functions, keep the website easy for customers to use and ensure that the website reflects the company's image (Bauer et al. 2002); Loiacono et al. 2007; Park et al. 2007).

The second research question identified the most important customer attributes that determine the service quality of OTA websites. The ease of understanding was identified as one of the underlying attributes of service quality, along with the response time and the navigation system operation of the website. Previous research has noted the higher order dimension of ease of use in terms of easy to read and understand, website functionality and navigability (Nusair and Kandampully 2008; Park et al. 2007; Tsang et al. 2010). This finding provides a broader perspective, with regards to services OTA customers' preferences in finding a business online, by highlighting the most important attributes. OTA managers should pay attention to customers' needs and preferences related to attributes such as website functionality and navigability that have been found to predict customer satisfaction, purchase intention and perceived value (Bernado et al. 2012).

The third research question investigated the role of demographic and/or Internet use profile variables in the perceived quality and the purchase intention. Examining the demographic variables, gender, age and educational level seemed to differentiate the perceived website quality. Analytically, for women, all the perceived quality dimensions exhibited significantly higher in comparison with men. However, there was no significant difference between genders in terms of purchase intention. These outcomes are consistent with previous research findings (Awad and Ragowsky 2008; Sebastianelli et al. 2008) which provide support that women are more concerned with online privacy and security than men. Also, Kim et al. (2013) added that women exhibited more emphasis on navigation functionality than men. In relation to age and education level, it was found a significant effect in the dimension of complementary relationship, without significant differences among the group categories. Thus, these findings imply that gender, age and educational level affect the perceived quality of OTA customers but not their purchase intention.

Furthermore, this study thoroughly explored the effect of Internet experience in the perceived quality and the purchase intention. From the results it was supported that the annual amount of time spent on online booking affects the complementary relationship dimension. This finding of expanded online experience is further supported by Conyette (2015, 2014) and Varma et al. (2000), who mentioned that experienced users behave differently on searching relevant services information and value the Web's ability to save them time over its cost saving capability. Also, a significant effect of the reasons of booking was found in all quality dimensions and in purchase intentions. Those customers who made an online booking for vocations were more concerned with quality determinants and were more willing to reuse the same OTA website than those who made an online booking for professional reasons and recreation. From the point of view of OTA customers, it seems that shopping motivations could have an influence on the perceived quality and willingness to purchase. In addition, it was found that the reason of visiting the website had a significant impact in the usefulness and the ease of use dimensions of quality, as well as in purchase intentions. The customers that visited an OTA website to search either for room availability, or available offers or make an online reservation appeared to be more concerned with the dimensions of usefulness and ease of use in comparison with browsers that were just looking for information.

There is evidence that the customers with prior experience on online booking, online shopping and those who visit an OTA website certainly searching for room availability and best deals, seemed to exhibit higher quality standards. This differentiation between the experienced online purchasers and the simple browsers, it can be interpreted as a consequence of the level of user familiarity within an online business environment. Given these points, the study outcomes add evidence to the important role of prior Internet experience and online purchase (Conyette 2015; Varma et al. 2000).

Finally, the results of the study confirmed the assumption that the perceived quality is positively correlated with purchase intention. In fact the customers who perceived higher level of quality were more willing to reuse the OTA website and purchase. This outcome is in consistence with several studies (Ho and Lee 2007; Huang 2008; Kim and Lee 2004; Liu and Zhang 2014; Park et al. 2007; Tsang et al. 2010; Wan 2002) who support that the online satisfaction level of customer plays a major and predictive role in loyalty, reuse and purchase intentions.

6.1 Originality/value

Summarizing the main points of this study, it is necessary for online travel agencies to understand that the Internet is a key component of online marketing and through their websites the travel agencies can provide information, attract customers and affect purchase intentions. Although knowledge of online consumers is considered vital for practitioners and essential for making decisions on how to develop and improve the quality of websites, there is a lack of common ground among the existing research with regard to the construct of e-quality based on consumer needs. The particular study will contribute to a better understanding of the needs and motivations of online travel agencies customers, by identifying significant factors that affect their willingness to purchase. It also contributes to build the concept of online travel agency quality performance. Furthermore, this research contributes to the body of knowledge about measuring online travel agency e-service quality by improving an e-quality measurement scale, which through a multidimensional approach highlights the high-order factors.

6.2 Implications

The theoretical implications of this study are the conceptualization of e-quality in the online travel agency context by examining the online needs of consumers with regard to online travel agency websites. Its results are also important for practitioners in the travel sector, offering valuable information on specific needs of online browsers and online purchasers in relation to the perceived quality and purchase intentions. From OTA's perspectives, identifying the key drivers of perceived quality in a particular context and linked to the magnitude of how well a website performs on this dimension, allows travel companies to make better decisions on how to improve the quality of their websites. The investigation of the perceived online quality offers a powerful tool for an OTA to segment customers with an effective way. Customer satisfaction within an online environment should be of first-order strategy of any travel agency. It is important for any business to have detailed knowledge of the total value of its customers through their consumer habits. Therefore, it is important for online travel agencies realize the power of those factors that affect the perceived quality, and to include functions that aim to fulfil online consumers' needs. By doing so, is expected that e-quality strategy will increase the utility of their websites, increase the perceived value for consumers and ultimately generate a purchase.

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Chapter 25
A Systematic Literature Review on Social Media Analytics and Smart Tourism

Marlon-Santiago Viñan-Ludeña

Abstract In recent years, the number of papers on how tourist use social media is increasing and is still being discussed. The main aim of this study is analyze the state of art by identifying the most important issues related to Social Media Analytics and Smart Tourism (SMAST) and offer some guidelines for future research through a Systematic Literature Review (SLR). The methodology used is based on collect, synthetize and analyze works published between 2014 and April 2018. This work is based on 45 papers obtained from three electronic databases, the result of this paper obtained twenty issues based on SMAST classified in four categories: (i) methodology of research, (ii) type of analysis, (iii) tourism current issues and (iv) social media type or platform. Furthermore, the top three of most popular issues obtained consist in: (1) works based in literature review, theoretical approach or explorative analysis; (2) Travel information, search or electronic word of mouth (eWOM), user-generated content (UGC) and (3) Social media activity analytics. The conclusion of this work emphasizes that the use of data generated by users in social networks and Smart Tourism are topics of great interest for researchers in tourism; challenges, opportunities and emerging approaches in SMAST are also presented.

Keywords Social media analytics · Smart tourism · Systematic literature review · Theoretical analysis · Explorative analysis · Travel information · eWOM · Social media activity analytics · UGC

JEL Classification Z OtherSpecialTopics

M.-S. Viñan-Ludeña (✉)
University of Granada, Granada, Spain
e-mail: marsantovi@gmail.com

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1 Introduction

Nowadays, there is a lot of interest from researchers in Data Analytics due to the large amount of unstructured information generated. However, one of the most interesting areas is the use of social media, where there are 3196 millions of users, 13% higher than in 2017 (We are social 2008–2018.), and according to the same report will keep growing. Due to many people use social media to communicate, find relevant information or any recommendation, a very important area of research has emerged i.e. social media analytics where consists of: (i) capture a lot of conversations that occur naturally in social media, (ii) transform it into useful data, (iii) find ways to talk sociologically about them (Brooker et al. 2017) and exploit that information. The benefits of obtain useful information has been taken advantage in areas such as management, economy, politics, tourism, etc.; where some researcher have reached a consensus that social networks affects consumer choice and increase profits (Aral et al. 2013; Piccialli and Jung 2017). This work is focused on analyzing the most important studies about social media analytics and smart tourism in such way that current issues, opportunities and challenges can be found. According to a report of United Nations World Tourism Organization UNWTO, in the European Union in 2017, 538 millions of tourists have arrived, 8% more than 2016 (UNWTO 2018). However, there aren't related works that makes a systematic literature review (SLR) that allows show the advantages, disadvantages, challenges and opportunities for researchers and professionals in the field of Social Media Analytics and Smart Tourism (SMAST). Therefore, there is a need to synthesize the research until now regarding the current issues related to SMAST.

The fundamental pillars of social media analytics are: social media, users or people and industry and technology that transforms conversations, comments, photos, videos, likes, blogs, tweets, etc., into data with a lot of value for analysts and marketing specialists whose aim is analyze and monitor user behavior, brand loyalty and other performance indicators, making these data effective (Misirlis and Vlachopoulou 2018). In this work, many issues discussed in the analyzed publications are identified to define future research in SMAST.

This study presents a complete analysis to understand and describe social media analytics focused on smart tourism through the review of relevant literature. The main aim of this paper is an extensive review of publications related to SMAST, creating a systematic map of publications found; for that it is essential to create a conceptual classification scheme (S3M) for the literature found, using four dimensions or categories, such us: research methodologies, type of analysis, current issues about tourism and type of social media platform (Misirlis and Vlachopoulou 2018), providing an overview of current research issues in SMAST. Additionally, this work benefits to researchers, people involved in tourism and governments where tourism is an essential part of their economies.

Thus, the following research questions are formulated for this systematic literature review:

RQ1: what are the current issues related to SMAST?
RQ2: what are the top ranking for future research topic in SMAST?

The structure of the paper is divided into five sections that are: the introduction, theoretical background, research methodology, the SLR result findings and conclusions, future research directions and limitations.

2 Theoretical Background

Smart Tourism
The term "smart" has become a buzzword to describe technological, economic and social developments using sensors-dependent technologies and large amount of data and information exchange (Gretzel et al. 2015). First of all, is necessary to have a clear idea about what is "Smart Tourism", this term is derived from the concept of "Smart City" whose objective is improve the quality of life of all citizens. The term "Smart Tourism" refers to the activity where tourist apply new technologies in sectors related to touristic experience services, applications for reservations, accommodation, transportation and restaurants; in addition, it is related as a social phenomenon where the existing hospitality industry and tourism industry are integrated with the use of information and communication technologies (ICT) (Hunter et al. 2015; Lee 2017). Thus, it is clear that the tourist activity is unquestionably linked to ICT.

Social Media Analytics
The term of Social Media Analytics SMA refers to "an emerging field of interdisciplinary research that aims to combine, extend and adapt methods for the analysis of social networks" (Stieglitz et al. 2014). Another definition considers it as a set of tools for "collect, analyze, summarize and visualize social network data, generally driven by specific requirements of a target application". (Zeng et al. 2010).

Applications and services related to tourism have been influenced by social networks that every year increase the number of users and its impact has been exploited by marketing companies in general. Social media analytics focused on tourism is based on the use of information and communication technology to collect, clean, process, analyze and visualize those data to transform it into useful information in order to improve both tourist services and tourist' experience.

Thus, it is possible to define Social Media Analytics and Smart Tourism as an interdisciplinary set of methods and techniques that allows collect data from social media (i.e. blogs, review sites, media sharing, question-and-answer sites, social bookmarking, social networking, social news and wikis) using technological services provided by Smart Cities to process, analyze and visualize useful information in order to improve services and tourists applications.

3 Research Methodology

This work uses the methodological process based on Systematic Literature Review mentioned in Okoli and Schabram (2010) and conceptual classification scheme named S3M by using four distinct dimensions/categories/criteria of classification and in each category issues are defined. This hybrid methodology allows to make a systematic literature review using a classification to have a general vision of issues, platforms, types of analysis and methodologies in each paper. Articles that use S3M can be found in five types of journals: Marketing and e-Marketing, e-business and management, behavioral sciences, information systems and social media, Misirlis and Vlachopoulou (2018), thus, S3M can be used in this work. Okoli and Schabram (2010) makes a SLR where the research questions are first determined, then the search, selection, classification and analysis is carried out.

In this manner the research questions (RQs) which were mentioned in the introduction are mentioned below:

RQ1: what are the current issues related to SMAST?
RQ2: what are the top ranking for future research topic in SMAST?

Subsequently, the search' information is performed. Thus, the search terms are chosen to answer the research questions and it's are combined with the use of Boolean operators (AND, OR). Terms used are: ("social media" analytics OR analysis AND "smart tourism"). This process was done on the three academic databases, such as: Scopus, Science Direct and IEEE. Articles belonging a books, book chapters, articles in press and review are excluded from the research. In total, 398 papers between 2014 to April 2018 were found. The year with the largest number of papers was published was 2017 with 135 articles and until April 2018, the number amounts to 47. According to the domain for this work, 45 of them were selected, those that are repeated among the selected databases were discarded. Thus, each study was revised in such way that the appropriate classification for SMAST can be established.

The methodology used in this work can be synthesized as shown in the Fig. 1.

The papers, which paper' title matches with the research questions are named as "found", the papers which abstract of them match with the research questions are named as "candidate" and the papers which results of them match with the research questions are named as "selected". Results are demonstrated in Table 1.

4 SLR and Findings

The 45 papers that have been selected after the analysis of title, abstract and results are used to answer the research question 1 (RQ1) (Table 2, sorted by id). Additional information as publisher, year, authors and source are presented.

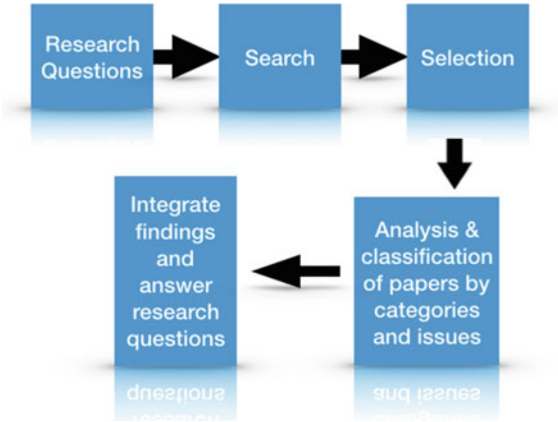

Fig. 1 Steps for selecting papers *Source* Own elaboration

Table 1. Classification and selection of papers per database

Source	Found	Candidates	Selected
Scopus	86	35	19
ScienceDirect	311	40	22
IEEE	19	10	4
Total	398	76	45

The 45 selected papers are distributed as follows: 4 published in 2014, with 8.8%, 7 published in 2015 with 15.5%, 15 published in 2016 with 33.3%, 17 published in 2017 with 37.7% and 2 published until April 2018 with 4.4%. Thus, the interest in SMAST is growing each year, being 2016 and 2017 the years with the largest number of studies were published.

Further, we proceed to classify according to four different dimensions. As mentioned initially, each article is subdivided according to: (i) the methodology of research, (ii) type of analysis, (iii) current issues in tourism and (iv) type of social media platform. The search, selection and classification of each work allows to summarize each publication, have a clear vision on topics on which each work is focused and find the current issues that generate more interest.

The term typology is used instead of taxonomy, the classification used in Misirlis and Vlachopoulou (2018) where this classification is adapted to this study. The categories of marketing and fields of study are discarded and a category based on tourism is added. Based on the analysis of works published and selected for this study, different subcategories specifically related to the tourism domain were identified where future studies and researchers can add, modify or eliminate issues or categories. Each work is related to the Smart Tourism, however; in the typology of "Tourism current issues" is added.

Based on the 45 papers analyzed, 6 current issues have been found in the field of tourism, which allows to answer the first research question RQ1: What are the

Table 2. List selected studies table

No.	Id	Title	Publisher	Year	Author	Source
1	P001	Adoption of travel information in user-generated content on social media: the moderating effect of social presence	Behaviour and Information Technology	Chung et al. ((2015)	Chung, Heejeong Han and Chulmo Koo	Scopus
2	P002	SoCoMo marketing for travel and tourism: Empowering co-creation of value	Journal of Destination Marketing and Management	Buhalis and Foerste (2015)	Dimitrios Buhalis, Marie Foerste	Scopus
3	P003	The role of prior experience in the perception of a tourism destination in user-generated content	Journal of Destination Marketing and Management	Marchiori and Cantoni (2015)	Elena Marchiori, Lorenzo Cantoni	Scopus
4	P004	The use of social media in travel information search	Telematics and Informatics	Chung and Koo (2015)	Namho Chung, Chulmo Koo	Scopus
5	P005	Tourism analytics with massive user-generated content: A case study of Barcelona	Journal of Destination Marketing and Management	Marine-Roig and Anton Clavé (2015)	Estela Marine-Roig, Salvador Anton Clavé	Scopus
6	P006	Identifying and ranking cultural heritage resources on geotagged social media for smart cultural tourism services	Personal and Ubiquitous Computing	Nguyen et al. (2017)	Tuong Tri Nguyen, David Camacho, Jai E. Jung	Scopus
7	P007	Social smart destination: a platform to analyze user generated content in smart tourism destinations	Advances in Intelligent Systems and Computing	Cacho et al. (2016)	Cacho, A., Figueredo, M., Cassio, A., (…), Cacho, N., Prolo, C.	Scopus
8	P008	A method for web content extraction and analysis in the tourism domain	ICEIS 2017 - Proceedings of the 19th International Conference on Enterprise Information Systems	Oro and Ruffolo (2017)	Oro, E., Ruffolo, M.	Scopus
9	P009	A novel popular tourist attraction discovering approach based on geo-tagged Social media big data	ISPRS International Journal of Geo-Information	Peng and Huang (2017)	Peng, X., Huang, Z.	Scopus
10	P010	Creating value from social big data: Implications for smart tourism destinations	Information Processing and Management	Del Vecchio (2017)	Pasquale Del Vecchio, Gioconda Mele, Valentina Ndou, Giustina Secundo	Scopus

(continued)

Table 2. (continued)

No.	Id	Title	Publisher	Year	Author	Source
11	P011	Generating travel-related contents through mobile social tourism: Does privacy paradox persist?	Telematics and Informatics	Hew et al. (2017)	Jun-Jie Hew, Garry Wei-Han Tan a, Binshan Lin, Keng-Boon Ooi	Scopus
12	P012	How can big data support smart scenic area management? An analysis of travel blogs on Huashan	Sustainability	Shao et al. (2017)	Jun Shao, Xuesong Chang and Alastair M. Morrison	Scopus
13	P013	Smart tourism technologies in travel planning: The role of exploration and exploitation	Information and Management	Huang et al. (2017)	C. Derrick Huanga, Jahyun Goo, Kichan Nam, Chul Woo Yoo	Scopus
14	P014	Social media analytics and value creation in urban smart tourism ecosystems	Information and Management	Neumann et al. (2017)	Tobias Brandt, Johannes Bendler, Dirk Neumann	Scopus
15	P015	Social support and commitment within social networking site in tourism experience	Sustainability	Chung et al. (2017)	Namho Chung, Inessa Tyan and Hee Chung Chung	Scopus
16	P016	The relationship among tourists' persuasion, attachment and behavioral changes in social media	Technological Forecasting and Social Change	Chung and Han (2017)	Namho Chung, Heejeong Han	Scopus
17	P017	Using geotagged resources on social media for cultural tourism: A case study on cultural heritage tourism	Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, LNICST	Nguyen et al. (2017)	Tuong Tri Nguyen, Dosam Hwang, and Jason J. Jung	Scopus
18	P018	Digital technology in a smart tourist destination: The case of Porto	Journal of Urbantechnology	Manuel et al. (2018)	Pedro Manuel da Costa Liberato, Elisa Alén-González & Dália Filipa Veloso de Azevedo Liberato	Scopus
19	P019	Do online information sources really make tourists visit more diverse places?: Based on the social networking analysis	Information Processing and Management	Lee et al. (2018)	Hyunae Lee, Namho Chung, Yoonjae Nam	Scopus
20	P020	Development of social media strategies in tourism destination	Procedia - Social and Behavioral Sciences	Pavlí (2015)	Alžbeta Kiráľová Antonín Pavlíčeka	Science Direct
21	P021	Heritage tourism entrepreneurship and social media: Opportunities and challenges	Procedia - Social and Behavioral Sciences	Surugiu (2015)	Marius-Razvan Surugiua, Camelia Surugiu	Science Direct

(continued)

Table 2. (continued)

No.	Id	Title	Publisher	Year	Author	Source
22	P022	How smart is your tourist attraction?: Measuring tourist preferences of smart tourism attractions via a FCEM-AHP and IPA approach	Tourism Management	Wang et al. (2016)	Xia Wang, Xiang (Robert) Li, Feng Zhen, JinHe Zhang	Science Direct
23	P023	A big data analytics method for tourist behaviour analysis	Information and Management	Jahan et al. (2017)	Shah Jahan Miaha, HuyQuan Vu, John Gammack, Michael McGrath	Science Direct
24	P024	Content mining framework in social media: A FIFA world cup 2014 case analysis	Information and Management	Thomaz et al. (2017)	Guilherme M. Thomaz, Alexandre A. Biz, Eduardo M. Bettoni, Luiz Mendes-Filho, Dimitrios Buhalis	Science Direct
25	P025	Exploring the capacity of social media data for modelling travel behaviour: Opportunities and challenges	Transportation Research Part C	Rashidi et al. (2017)	Taha H. Rashidi, Alireza Abbasi, Mojtaba Maghrebi, Samiul Hasan, Travis S. Waller	Science Direct
26	P026	Mapping Cilento: Using geotagged social media data to characterize tourist flows in southern Italy	Tourism Management	Chua et al. (2016)	Alvin Chua, Loris Servillo, Ernesto Marcheggiani, Andrew Vande Moere	Science Direct
27	P027	Measuring tourism destinations using mobile tracking data	Tourism Management	Raun et al. (2016)	Janika Raun, Rein Ahas, Margus Tiru	Science Direct
28	P028	Opinion mining from online hotel reviews—A text summarization approach	Information Processing and Management	Hu et al. (2017)	Ya-Han Hu, Yen-Liang Chen, Hui-Ling Chou	Science Direct
29	P029	Predicting hotel review helpfulness: The impact of review visibility, and interaction between hotel stars and review ratings	International Journal of Information Management	Hu and Chen (2016)	Ya-Han Hu, Kuanchin Chen	Science Direct
30	P030	Shared experience in pretrip and experience sharing in posttrip: A survey of Airbnb users	Information and Management	Joo et al. (2017)	Sung Joo Bae, Hyeonsuh Lee, Eung-Kyo Suh, Kil-Soo Suh	Science Direct
31	P031	Effects of tourism information quality in social media on destination image formation: The case of Sina Weibo	Information & Management	Kim et al. (2017)	Sung-Eun Kim, Kyung Young Lee, Soo Il Shin, Sung-Byung Yang	Science Direct

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Table 2. (continued)

No.	Id	Title	Publisher	Year	Author	Source
32	P032	Effects of user-provided photos on hotel review helpfulness: An analytical approach with deep leaning	International Journal of Hospitality Management	Ma et al. (2018)	Yufeng Ma, Zheng Xiang, Qianzhou Du, Weiguo Fan	Science Direct
33	P033	Obtaining a better understanding about travel-related purchase intentions among senior users of mobile social network sites	International Journal of Information Management	Ja et al. (2017)	Myung Ja Kim, Choong-Ki Lee, Mark Bonn	Science Direct
34	P034	Social media analytics: Extracting and visualizing Hilton hotel ratings and reviews from TripAdvisor	International Journal of Information Management	Chang et al. (2017)	Yung-Chun Chang, Chih-Hao Ku, Chun-Hung Chen	Science Direct
35	P035	Social return and intent to travel	Tourism Management	Boley et al. (2018)	B. Bynum Boley, Evan J. Jordan, Carol Kline, Whitney Knollenberg	Science Direct
36	P036	What makes tourists feel negatively about tourism destinations? Application of hybrid text mining methodology to smart destination management	Technological Forecasting and Social Change	Kim et al. (2017)	Kun Kim, Oun-joung Park, Seunghyun Yun, Haejung Yun	Science Direct
37	P037	Will firm's marketing efforts on owned social media payoff? A Quasiexperimental analysis of tourism products	Decision Support Systems	Chang et al. (2017)	Hsin-Lu Chang, Yen-Chun Chou, Dai-Yu Wu, Sou-Chein Wu	Science Direct
38	P038	The effects of social media on emotions, brand relationship quality, and word of mouth: An empirical study of music festival attendees	Tourism Management	Hudson et al. (2015)	Simon Hudson, Martin S. Roth, Thomas J. Madden, Rupert Hudson	Science Direct
39	P039	The use of social media in travel information search	Telematics and Informatics	Chung and Koo (2015)	Namho Chung, Chulmo Koo	Science Direct
40	P040	Using social network analysis to explain communication characteristics of travel-related electronic word-of-mouth on social networking sites	Tourism Management	Luo and Zhong (2015)	Qiuju Luo, Dixi Zhong	Science Direct

(continued)

Table 2. (continued)

No.	Id	Title	Publisher	Year	Author	Source
41	P041	Likes—The key to my happiness: The moderating effect of social influence on travel experience	Information and Management	Sedera et al. (2017)	Darshana Sedera, Sachithra Lokuge, Maura Atapattu, Ulrike Gretzel	Science Direct
42	P042	Big data in tourism industry	Iternational Conference on e-Commerce with focus on e-Tourism	Shafiee and Ghatari (2016)	Sanaz Shafiee, Ali Rajabzadeh Ghatari	IEEE
43	P043	Mapping smart tourism research in China: A semantic and social network analysis using CiteSpace	Service Systems and Service Management (ICSSSM)	Zhang et al. (2016)	Qiu Zhang, Qiang Wang, Jin-Xing Hao	IEEE
44	P044	Landmark reranking for smart travel guide systems by combining and analyzing diverse media	IEEE Transactions on Systems, Man, and Cybernetics: Systems	Shen et al. (2016)	Junge Shen, Jialie Shen, Tao Mei, and Xinbo Gao	IEEE
45	P045	Social-aware visualized exploration of tourist behaviours	Big Data and Smart Computing (BigComp)	Li et al. (2016)	Mingzhao Li, Zhifeng Bao, Liangjun Song and Henry Duh	IEEE

Table 3. S3M typology for social media analytics and Smart Tourism

Methodology of research	Literature review and/or Theoretical approach/Explorative analysis	I01
	Surveys (Questionnaire based research/Non questionnaire based research	I02
Type of analysis	Predictive analysis	I03
	Natural Language process (NLP)—Text analysis	I04
	Effectuation analysis	I05
	Statistical analysis	I06
	Sentiment analysis	I07
	Social media activity analysis	I08
	Structural equation modelling (SEM) Techniques	I09
Current issues in tourism	Destination and attractions	I10
	Decision making/marketing	I11
	Travel/Tourism satisfaction	I12
	Mobility behavior/tourism movements	I13
	Travel information/Search/Electronic word of mouth eWOM	I14
	Privacy Concern	I15
Social media type/ platform	Social networking sites (Facebook, LinledIn, Instagram, MySpace, Sina Weibo, Criteo)	I16
	Blogs/Microblogs (Blogspot, diggwordpress, Twitter, Tumblr, twitxr, tweetpeek, plurk, TravelBlogs, Mafengwo, Baidu Tourism, and Ctrip)	I17
	Content communities—Video sharing sites (Youtube, Flickr, slideshare)	I18
	Forums—discussion (Phpbb, phorum, skype, messenger, google talk)	I19
	Online travel reviews (TripAdvisor, Yelp, Airbnb, www.virtualtourist.com)	I20

current issues related to SMAST?; such as: (i) destination and attraction, (ii) decision making/marketing, (iii) travel satisfaction/tourism satisfaction, (iv) Mobility behavior/tourism movements, (v) travel information/search information/Electronic word of mouth (eWOM)/user-generated content (UGC). This current issues are related with the work of Shafiee and Ghatari (2016); they mention topics such as: service quality, reputation and destination image, UGC as eWOM, experiences, behaviors and movements patterns (Table 3).

Each study analyzed can be based on one or several issues in different categories or dimensions. Nevertheless, each work uses a methodology of research, one or many types of analysis and if required, the data of a social media platform for analysis. On the other hand, some papers uses surveys as source of information to perform analysis (e.g. to find the level of travel satisfaction some researchers use surveys to get the perceptions of users before, during and after about their travel and their relation with the use of social media). The paper relationship with the categories and issues can be seen in Table 4.

Table 4. Matrix by paper, categories and issues

Paper ID	Category																			
	M. of R.		Type of analysis						Current issues in tourism						Social media type/platform					
	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13	I14	I15	I16	I17	I18	I19	I20
P001		√							√					√						
P002	√									√				√						
P003		√								√				√						
P004		√							√					√						
P005	√							√		√							√			
P006	√							√		√						√		√		
P007	√							√		√				√			√			
P008	√			√			√	√								√				
P009	√			√						√	√							√		
P010	√						√	√		√	√					√				
P011		√							√				√	√						
P012	√						√			√		√					√			
P013		√							√		√	√								
P014	√			√				√					√	√			√			
P015	√								√			√		√	√					
P016		√				√			√					√						
P017	√							√						√		√		√		
P018		√				√				√		√								
P019	√							√						√						
P020	√							√		√										
P021	√									√										
P022	√								√	√										

(continued)

Table 4. (continued)

Paper ID	Category																			
	M. of R.		Type of analysis						Current issues in tourism						Social media type/platform					
	I01	I02	I03	I04	I05	I06	I07	I08	I09	I10	I11	I12	I13	I14	I15	I16	I17	I18	I19	I20
P023	√		√	√						√	√							√		
P024	√			√										√			√			
P025		√				√							√							
P026	√												√				√			
P027	√									√			√							
P028	√			√			√													√
P029	√		√											√						√
P030		√				√			√					√						
P031		√						√	√	√				√		√				
P032	√		√											√						√
P033		√							√		√									
P034	√			√			√							√						√
P035		√							√	√										
P036	√			√			√							√						√
P037	√					√								√		√				
P038		√							√					√						
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P045	√							√						√						

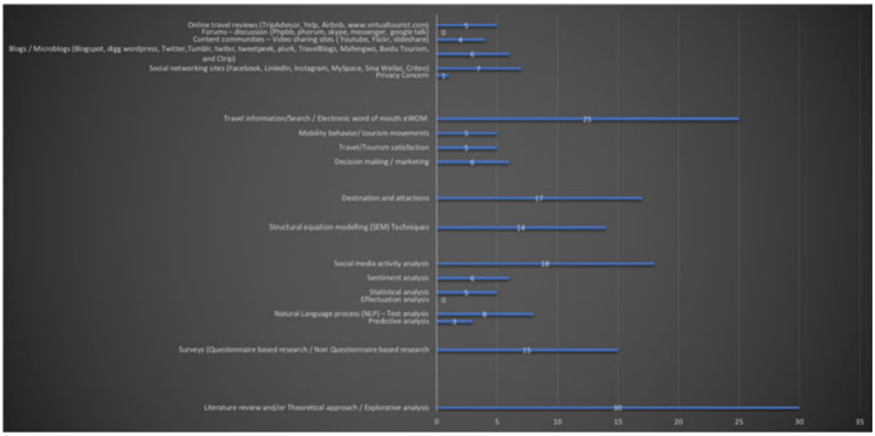

Fig. 2 Current SMAST Issues. *Source* Own elaboration from Microsoft Excel

To answer RQ2: what are the top ranking for future research topic in SMAST?. According to the data collected from Table 2, the papers selected are analyzed according to the categories and issues. Table 3 is analyzed and grouped according to categories and issues, further. The number of papers for each issue that were discussed can be seen on the graph of Fig. 2.

5 Conclusions, Future Research Directions and Limitations

This study presents an overview of the current issues on which researchers at SMAST are based, through the systematic literature review about of published papers between 2014 and April 2018. After the search 389 papers were found, of them the candidate publications were 76 and of them, through a thorough review 45 were selected.

The 45 selected studies were categorized according to the recommendation of Misirlis and Vlachopoulou (2018), they use S3M; nevertheless, it was adapted to the present work where current issues in tourism were identified and for this six issues were identified: (i) destination and attraction, (ii) decision making/marketing, (iii) travel satisfaction/tourism satisfaction, (iv) Mobility behavior/tourism movements, (v) travel information/search information/Electronic word of mouth (eWOM)/user-generated content (UGC);are issues that researchers have put a lot of interest in the field of tourism or smart tourism; and, the rest of issues related with social media analytics. The results show the current issues about of SMAST that allows to answer the first research question. To answer the second research question, after analyze the results obtained in Table 3, the current issues with the most numbers of works was: (1) Literature review/Theoretical approach/ Explorative analysis is in first place with 30 papers followed by (2) Travel information/Search information/Electronic word of mouth (eWOM), user-generated content (UGC) with 30 papers and (3) Social media activity analysis with 18 papers. It is clear that tourism researchers are based on testing from different areas and topics of sciences (e.g. mental accounting theories or prospect theory) in such way, that they can experiment with data generated from social media platforms. There is also, a lot of interest in the quality of the data generated from social media, because this influences other users to choose a destination for their holidays and can be used for marketing purposes and higher revenues for the tourism industry. Results presented in this work can help to researchers to better understand trends based on SMAST, and also, reveals the lack of interest in issues such as privacy of data in social media; this issue is a serious problem that could be addressed in future research. Another issue found that has not been addressed and has a great relevance in the sector is: Travel satisfaction; although, there are some research based on the use of surveys or questionnaires and their associated possible biases (e.g. social desirability biases, short-term recall biases, etc.) without taking into account data generated in social networks that can be processed with NLP techniques combined with machine and deep learning techniques, this generate new challenges and opportunities for future research. The present study is not without limitations; the search of information was made with terms such as: "social media analytics and smart tourism" and not separately (e.g. destinations, decision making, travel satisfaction, etc.) which would give a clearer idea of studies conducted in specific issues of tourism. This work may be used as a research reference for the next 3–5 years and can be used as a reference for future review studies in SMAST.

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Chapter 26
What is Affecting Customers' Intention to Perform Social Media Marketing Activities in the Hotel Industry?

Anastasios-Ioannis Theocharidis, George Karavasilis, Vasiliki Vrana, Evangelos Kehris and Konstantinos Antoniadis

Abstract Social media marketing is a connection between brands and consumers, offering a personal channel for user centered networking and social interaction. The research employs constructs adapted from the Technology Acceptance Model, integrates them with other constructs and investigates factors affecting Greek consumers' acceptance of social media marketing in the hotel industry. The conceptual model is tested using Structural Equation Modeling (SEM) analysis. The study identifies six factors that directly or indirectly influence intention to perform Social Media Marketing Activities. These factors are: Perceived ease of use, Perceived usefulness, Permission Based Acceptance, Fear about social media marketing, Social media Use, and Attitudes towards marketing with social media. The model raises fundamental issues that hotel managers, decision-makers and social media specialists should take into account to increase customers' intention to perform social media marketing activities, like booking, using social media applications.

Keywords Digital marketing · Social media marketing · Consumer's acceptance Structural equation modeling

JEL Classification M31 · Z32

1 Introduction

Nowadays use of the World Wide Web, social media, mobile applications, and other digital communication technologies has become a part of billions of people's lives (Stephen 2015). Social media users are more than 1.6 billion worldwide while

A.-I. Theocharidis · G. Karavasilis · V. Vrana (✉) · E. Kehris
Technological Education Institute of Central Macedonia, Serres, Greece
e-mail: vrana.vasiliki@gmail.com

K. Antoniadis
University of Macedonia, Thessaloniki, Greece

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in 2017 the number of mobile-only internet users worldwide was expected to close in on half a billion users (Statista 2017a). Social networking is one of the most popular ways for online users to spend their time, stay in contact with friends and families and catch up with news and other content (Statista 2017b). Facebook is the absolute market leader with more than 1.13 billion daily active users among all ages. People spend more than 20 min a day on Facebook and generate over 4 million likes per minute (Hootsuite 2017). Twitter has more than 330 million monthly active users (DMR 2017a), Instagram more than 800 million monthly active users and more than 500 million daily active users (DMR 2017b). The total number of people who use YouTube is 1.3 billion, who upload 300 h of video are every minute and watch almost 5 billion videos every single day (YouTube 2017).

Growth of the number of Internet and social media users, must be credited for the growth of digital marketing (Pawar 2014). People use social media as consumers to search for information about products, purchase and consume, communicate with others and communicate their buying experiences. Thus, social media have become a major factor in influencing consumer's behavior. As users are exposing themselves more and more to social media, marketers increase their use as digital marketing channels (Stephen 2015).

Companies can use social media applications to communicate, to talk with their customers. This role of social media is consistent with the traditional integrated marketing communications tools. However social media have another interrelated promotional role in the marketplace. Customers can use social media to consuming content, to communicate one another, participate in discussions, share their knowledge and thus to contribute to other consumers' activities (Heinonen 2011). This role is unique and the uniqueness lies in the magnitude of the communication (Mangold and Faulds 2009). Gillin (2007, p. 4) wrote '*Conventional marketing wisdom has long held that a dissatisfied customer tells ten people. But that is out of date. In the new age of social media, he or she has the tools to tell 10 million'*. The size of the network of connections that an individual can successfully mobilize is very important (Paquette 2013) and can have a dramatic impact on a brand's reputation (Kim and Ko 2010). What is of most importance is that consumers' trust content generated by other consumers in social media rather than advertisements produced by the companies (Taylor et al. 2012).

The fundamental problem motivating this paper is the need to understand the factors that might have an impact on consumers' acceptance of social media marketing in the hotel industry, as the theory in the field of social media marketing acceptance is still in its infancy. When new technologies are introduced, technology adoption models are used to explain and analyze the factors influencing the adoption and diffusion of them. Adoption models try to mimic the behavior of individuals (Bwala and Mutula 2014). The paper proposes and validates a model for investigating the factors affecting the intention of customers to perform marketing activities through social media in the hotel industry.

2 Factors Affecting Social Media Marketing Acceptance

Technology Acceptance Model (TAM) is a well-established model developed by Davis (1980) and Davis et al. (1989). It only employs perceived usefulness and perceived ease of use to explain consumer acceptance. Its major advantage is that it can be extended when new technologies are introduced. A system's actual usage is mostly influenced by the person's behavioral intentions toward usage and is influenced by perceived ease of use and perceived usefulness of the system (Davis 1980). Perceived ease of use is defined as "*the degree to which a person believes that using a particular system would be free of physical and mental effort*" and perceived usefulness of the system as "*the degree to which a person believes that using a particular system would enhance his or her job performance*" (Davis 1980, p. 320). Perceived usefulness in online communities is seen as usefulness of information acquisition, information exchange, and relationship development (Chung et al. 2010). Suksa-ngiam and Chaiyasoonthorn (2015) found that perceived ease of use has a positive effect on perceived usefulness of social media. Thus, the present model includes perceived ease of use and perceived usefulness as two main constructs that might have an effect on social media marketing activities. The following hypotheses are formed:

H1: Perceived ease of use has a positive effect on social media marketing activities

H2: Perceived usefulness has a positive effect on attitudes towards marketing with social media.

Social media applications have connected people in a way never before possible and have created the greatest CRM tool ever produced as they allow any user and brand to pay to promote content to target groups. In U.S.A. online marketing is subject to Federal Trade Commission (FTC), rules about product and advertising endorsement. According to FTC's official position, if a person is being compensated to talk about someone's product, then he/she needs to disclose it. However, rules may vary widely in other geographies.

Mobile marketing is subject to government regulation, in many countries. That is, the customer has to provide personal data to the marketer and prior permission from the customer is needed before a mobile marketing message can be sent (Jayawardhena et al. 2009). Regarding social media Facebook is a prime example as a marketer would have to send a friend request (permission) to the potential prospects in order to post, share, or amplify. Based on the above the following hypotheses are formed:

H3: Permission Based Acceptance has a positive effect on social media marketing activities.

Trust appears in every aspect of social interactions (Colesca 2009) and is a key ingredient for building relationships with customers (Morgan and Hunt 1994). Trust can be defined as '*an individual's* (trustor, here is customer) *belief or expectation that another party* (trustee, here the hotelier) *will perform a particular action important to trustor in the absence of trustor's control over trustee's performance*' (Alsaghier et al. 2009, p. 298).

In an online environment customers trust the online hotelier to deliver accurate information, fair pricing policies; and not to participate in unauthorized use of credit card and violations of privacy (Gefen et al. 2003). Trust is an indicator of the relationships, an essential element of social media sites (Kim and Ahmad 2013) and a high level of trust can facilitate online communication (Cheng et al. 2017). These being the case, potential customers develop perceptions of trust based on their social media experience, such as delivery of relevant and innovative information, security features and efficient facilitation of booking procedure. Thus, the following hypothesis is formed to test that above:

H4: Trust to on-line hoteliers has a positive effect on social media marketing activities.

Risk is defined as the '*potential for the realization of unwanted, negative consequences of an event*' (Rowe 1977, p. 24). Previous research in the context of e-commerce found that risk is a main barrier towards acceptance and reduces users' intentions to exchange information and complete transactions (Pavlou 2003; Warkentin et al. 2002). Malhotra et al. (2004) claimed that privacy issues influence consumers' attitudes to use online marketing and Gao et al. (2013) found that risk avoidance not only influence consumers' attitude toward mobile marketing but also weakens the effect of perceived usefulness on attitude.

This may be the case as well with social media marketing. The risk associated with social media marketing may impact consumers' attitudes towards social media marketing. Thus:

H5. Risk avoidance has a negative influence on attitude towards social media marketing.

Consumes are also likely to fear and avoid things that they do not understand (Safko and Brake 2009). They fear the unknown, the lack of privacy and the feeling that they are more exposed than they ever have been. Most of the fears come from the false assumptions about what kind of information are required to share and lack of knowledge about the Social Media networks (Wired 2009). Akar and Topçu (2011) mentioned that consumers' fears about marketing with social media affect their attitudes toward marketing with social media. The following hypothesis is formed:

H6: Fear about social media marketing has a negative effect on attitudes toward marketing with social media.

Blomfield-Neira and Barber (2014) operationalized the construct of social media use as the creation of a profile online that others can see, on an SNS like Facebook, Bebo or MySpace. After creating a profile a user may choose to 'follow' another user that is to see all of another user's posts in their content feed. Customers' involvement through social media is a key factor in marketing (Do-Hyung et al. 2007). Getting users to follow their accounts is a primary objective for brands having a social media presence (Bigcommerce 2017). Thus, the following hypothesis is formed:

H7: Social media use has a positive effect on attitudes toward marketing with social media.

Attachment theory describes strong "bonds" between the person and the attachment object. Van Meter et al. (2015) defined attachment to social media as '*the strength of a bond between a person and social media*' (p. 71) and they claimed that individuals "*who are more strongly attached to social media would be especially desirable regarding marketing initiatives and campaigns designed for social media*" (p. 84). If customers develop feelings of attachment, they become fans of a product or a brand, and are likely to recommend products to others, through their social media profiles and even add value by providing user-generated content (Sashi 2012).

H8: Attachment to social media has a positive effect on attitudes toward marketing with social media.

Social media applications are ever-changing (Abbott 2017) and as they persist over time, users' interactions and experiences may change in the future. This is because of changes in design, in user populations, and gradual development of individual users' social context (Lampe et al. 2008). In the long run, this dynamism may affect how users perceive them. Akar and Topçu (2011) claimed that in the future, users may come to think that social media like Facebook and YouTube will become old fashioned and will lose their significance in the future and therefore their marketing power. In this vein the following hypothesis is formed:

H9: Foresight about social media has a positive effect on attitudes toward marketing with social media.

Attitude toward a specific information technology is conceptualized as a potential user's assessment of the desirability of using that technology (Davis et al. 1989). It is a significant factor that can shape people's minds and make them behave in a quite consistent way toward similar objects (Kotler and Keller 2006). When a person has a positive attitude towards a brand is more likely to use a product (Chiou et al. 2008). According to TAM attitude predicts an individual's use of technology and it has a direct effect on intention to use. Specific to this research, consumer attitudes' relates to users' receptiveness and intention to perform marketing activities such as booking or managing a booking through social media applications (Fig. 1).

H10: Attitudes toward marketing with social media has a positive effect on Social Media Marketing Activities.

3 Methodology

Figure 1 presents the research model and the formulated hypotheses. An empirical research study was conducted using an online survey on individuals in order to validate the proposed model. The questionnaire was administered to internet and social media users only, as nonusers may have not favorable attitudes towards the use of social media marketing and are electronically incapable of accessing social media.

A link to the questionnaire was posted on Facebook and to a popular blogs of students. Users willing to participate in the survey visited a tailor made website and

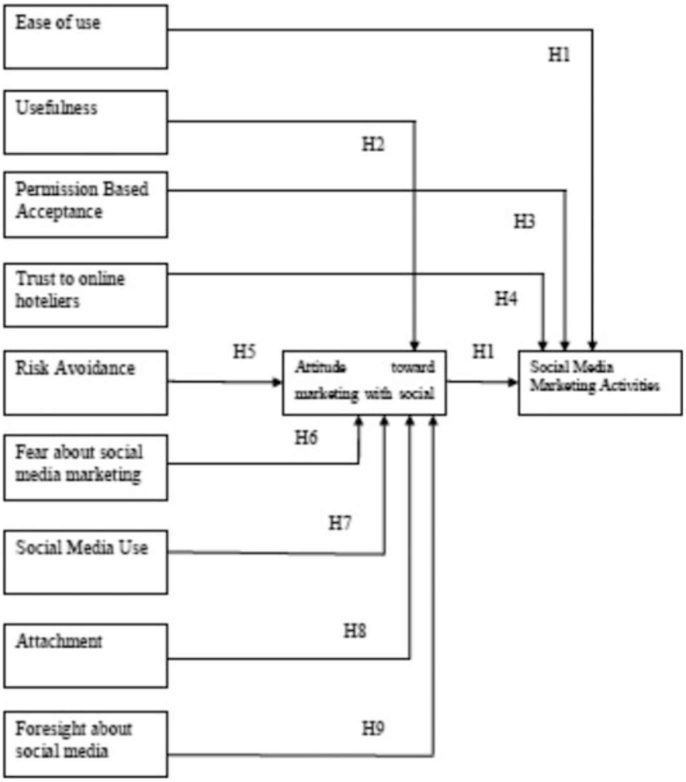

Fig. 1 The research model

responded to the questionnaire. The questionnaire was written and administered in Greek and it consists of 11 parts. The data were recorded to a database. Finally, 640 completed and usable questionnaires were received.

Five-point Likert scales ranging from strongly disagree to strongly agree were used. Constructs and items in the questionnaire were adopted from previous research to increase the validity of the study.

4 Findings

4.1 Model Estimation

When we have ordered categorical data with 5 or less ordered categories a robust DWLS estimator should be used in order to find the model's estimates (Hancock and Mueller 2012, p. 475). Specifically, the weighted least squares mean and

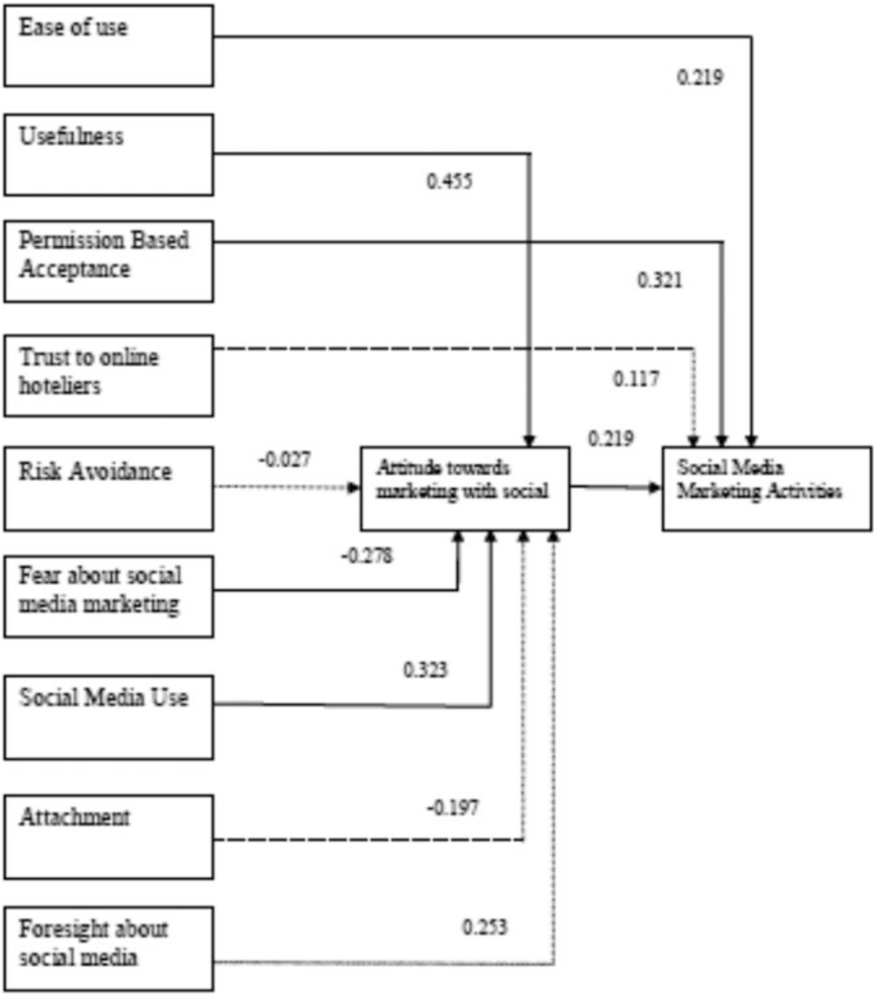

Fig. 2 The validated model

variances adjusted (WLSMV) (Finch and French 2015, p. 39–40) has been used from the lavaan R package (Rosseel 2012).

4.2 *The Measurement Model*

The measurement model was first examined for validating and refining the research constructs. Then analysis of the Structural Equation Model was used for testing the research hypotheses in the research model.

For model refinement Confirmatory Factor Analysis was used. For testing the measurement model, convergent validity, discriminant validity, and internal consistency of the constructs are examined. Reliability and convergent validity of the measurements are estimated by the item factor loadings, Composite Reliability, and Average Variance Extracted (Fornell and Larcker 1981).

Convergent validity refers to "*the extents to which the items under each construct are actually measuring the same construct*" (Karavasilis et al. 2016, p. 9). Two methods were applied in order to assess convergent validity. First, according to Teo et al. (2008) factor loading of each item on its corresponding construct must be higher than 0.55. As it is recorded in Table 1 all factor loading are above the suggested threshold. Next, convergent validity was assessed using the average variance extracted (AVE) for each construct. The AVE for a construct "*reflects the ratio of the construct's variance to the total variance among the items of the construct*" (Karavasilis et al. 2016, p. 9). The AVE values exceeding 0.50 indicate the reliability of the measurement model in measuring the construct (Hair et al. 1998; Teo et al. 2008). As shown in Table 2. the AVE values of the constructs are all above the recommended level.

Table 1 Items Used and CFA loadings

Items used	Factor loadings
Social Media Use (SME) (adapted from Akar and Topçu 2011)	
I use social networking sites such as Facebook regularly	0.811
I like using social media applications such as YouTube, Facebook, and blogs	0.854
I use video sharing sites such as YouTube regularly	0.605
Attachment (ATCH) (adapted from Gao et al. 2013)	
I can't live without using social media applications	0.827
I use social media applications 24/7	0.855
I am "addicted" to social media applications	0.780
Foresight about social media (FSM) (adapted from Akar and Topçu 2011)	
I think that social networking sites such as Facebook will become old fashioned	0.891
I think that YouTube will become old fashioned	0.639
Fear about social media marketing (FEAR) (adapted from Akar andTopçu 2011)	
I think that hotels' marketing with social media applications is a waste of time	0.856
I think that marketing with hotels' marketing with social media applications is worrisome	0.720
Trust to online hoteliers (TRU) (adapted from O'Cass and Carlson, 2012)	
I feel safe in my transactions with the hotels' social media applications	0.855
Profiles of hotels' social media are trustworthy	0.768
I feel that any information communicated by the hotels' social media applications is secure	0.669
Ease of use (EOU) (adapted from Karavasilis et al. 2016)	

(continued)

Table 1 (continued)

Items used	Factor loadings
Learning to interact with social media used by hotels would be easy for me	0.777
I believe interacting with social media used by hotels would be a clear and understandable process	0.814
I would find most social media used by hotels to be flexible to interact with me	0.786
It would be easy for me to become skillful at using social media used by hotels	0.726
Usefulness (USEF) (adapted from Karavasilis et al. 2016)	
Using social media used by hotels enables me to do business with them anytime	0.739
Using social media used by hotels enables me to accomplish tasks more quickly	0.9795
The results of using social media used by hotels are apparent to me	0.826
Using social media used by hotels can cut booking time	0.732
Using social media used by hotels can make booking procedure easier for me	0.824
Risk avoidance (RA) (adapted from Gao et al. 2013)	
I often reluctant to provide personal information, to social media used by hotels, such as my name and e-mail address in order to receive something of value to me	0.963
I am often reluctant to provide my personal information, to social media used by hotels, such as my name or email address in order to access news and information in which I am interested	0.639
Attitudes towards marketing with social media (ASMM) (adapted from Akar and Topçu 2011)	
It is necessary for hotel companies to use social media sites such as Facebook for the purposes of marketing	0.817
It is a good idea to market hotels with social media applications	0.742
Marketing with social media applications is very interesting.	0.840
I think that hotel companies should take part in social media applications	0.817
I believe that marketing with social media applications such will be amusing	0.829
I think that marketing with social media is the future of marketing	0.799
Permission Based Acceptance (PBA) (adapted from Gao et al. 2013)	
I would be willing to receive offers on my social media accounts	0.904
Overall, I would be willing to receive offers on my social media accounts from hotels to whom I gave my permission	0.651
Social media marketing activities (SMMS) (adapted from Akar and Topçu 2011)	
Booking online through social media applications	0.962
Manage bookings through social media applications	0.923

Discriminant validity tests whether constructs that are not supposed to be related are actually unrelated and refers to "*the extent to which a given construct differs from other constructs*" (Karavasilis et al. 2016, p. 9). Discriminant validity is satisfied as all items loaded more heavily on their corresponding constructs rather

Table 2 CR & AVE of the constructs

Construct	CR	AVE
Perceived ease of use	0.95	0.60
Perceived usefulness	0.95	0.61
Permission based acceptance	0.89	0.67
Trust to online hoteliers	0.85	0.62
Risk avoidance	0.76	0.66
Fear about social media marketing	0.86	0.62
Social media use	0.82	0.55
Attachment	0.85	0.68
Foresight about social media	0.76	0.61
Attitudes towards marketing with social media	0.97	0.66
Social media marketing activities	0.94	0.89

than on other constructs. Square roots of all AVEs are larger than correlations among constructs, thus satisfying discriminant validity.

All the inter-construct correlations are below 0.9 as shown in Table 3. Also the estimated correlation between all construct pairs is below the suggested cutoff of 0.9 and this implies distinctness in construct content or discriminant validity (Teo et al. 2008).

Compared to Cronbach's alpha, which assumes equal weights of all the items of a construct and is influenced by the number of items, Composite Reliability relies on actual loadings to compute the factor scores and thus provides a better indicator for measuring internal consistency (Teo et al. 2008). As shown in Table 4, Composite Reliabilities are above the threshold of 0.7. Overall, the measures in this study are reliable and valid.

Next the goodness-of-fit of the research model is estimated. According to Hair et al. (1998) and Bagozzi and Yi (1988), recommended indices for evaluating the overall model fitness are:

- goodness-of-fit index (GFI)
- normed fit index (NFI)
- non-normed fit index (NNFI)
- comparative fit index (CFI)
- root-mean-square error of approximation (RMSEA).

The chi-square test provides a statistical test for the null hypothesis that the model fits the data. The index is too sensitive to sample size differences, especially where the sample sizes exceed 200 respondents (Fornell and Larcker 1981) thus Bagozzi and Yi (1988) suggested instead of chi-square, a chi-square per degrees of freedom instead. All of the fit indexes indicate that the structural model has a good fit (Table 5).

Table 3 Inter-construct correlations

	Perceived ease of use	Perceived usefulness	Permission based acceptance	Trust to online hoteliers	Risk avoidance	Fear about social media marketing	Social media use	Attachment	Foresight about social media
Perceived ease of use	1.00								
Perceived usefulness	0.682	1.00							
Permission based acceptance	0.419	0.544	1.00						
Trust to online hoteliers	0.583	0.457	0.337	1.00					
Risk avoidance	−0.249	−0.297	−0.229	−0.338	1.00				
Fear about social media marketing	−0.296	−0.272	−0.314	−0.191	0.301	1.00			
Social media use	0.528	0.367	0.445	0.284	−0.171	−0.299	1.00		
Attachment	0.382	0.297	0.331	0.328	−0.128	−0.177	0.674	1.00	
Foresight about social media	−0.129	0.009	0.043	−0.052	0.240	0.232	−0.282	−0.105	1.00

Table 4 Cronbach's alpha

Construct	Crombach a
Perceived ease of use	0.86
Perceived usefulness	0.90
Permission based acceptance	0.87
Trust to online hoteliers	0.83
Risk avoidance	0.76
Fear about social media marketing	0.78
Social media use	0.81
Attachment	0.87
Foresight about social media	0.73
Attitudes towards marketing with social media	0.92
Social media marketing activities	0.94

Table 5 Goodness of fit

Fit index compared to the recommended value	Measurement model
Chi-square/d.f. $\leq$ 3.0	0.59
GFI $\geq$ 0.80	0.998
AGFI $\geq$ 0.80	0.998
NFI $\geq$ 0.90	0.978
NNFI $\geq$ 0.90	1.018
RMSEA $\leq$ 0.08	0.000
CFI $\geq$ 0.90	1.000

4.3 The Validated Model

The study identified six factors that directly or indirectly influence intention to perform Social Media Marketing Activities. These factors are: Perceived ease of use, Perceived Usefulness, Permission Based Acceptance, Fear about social media marketing, Social media Use, Attitudes towards marketing with social media.

Consistent with previous studies, findings support the role of perceived ease of use as a fundamental factor in the adoption of social media marketing as it has a direct positive effect on Intention to perform Social Media Marketing activities ($\gamma = 0.219$, $p < 0.05$), so H1 is supported. If hotels develop profiles on social media that are easy to use will enhance users' intention to perform Social Media Marketing activities.

Perceived usefulness directly influences user's attitudes towards marketing with social media ($\gamma = 0.455$, $p < 0.05$), so H2 is supported. An increase in perceived usefulness positively influences users' attitudes towards marketing with social media. Perceived usefulness indirectly enhances users' intention to perform Social Media Marketing Activities through attitudes towards marketing with social media.

Permission Based Acceptance has direct positive influence on intention to perform Social Media Marketing Activities ($\gamma = 0.321$, $p < 0.05$). Thus, H3 is supported. If hotels treat people with respect is the best way to earn their attention.

Contrary to our expectations, trust to online hoteliers was not found to have significant influence on intention to perform Social Media Marketing Activities, so H4 is not supported. Risk avoidance also, was not found to have significant influence on attitudes towards marketing with social media. H5 was neither supported.

Fear about social media marketing has a direct negative effect on attitudes towards marketing with social media ($\gamma = -0.278$, $p < 0.05$). Thus H6 is supported. In order customers to consider marketing activities in more positive manner hotels should make efforts to reduce their fear. Hotels should use confidence-building mechanisms such as the use of data encryption, secure environment by using specific protocols and procedures to ensure privacy of personal data. In addition to this, hotels should communicate best marketing practices and statistics showing customers' satisfaction from marketing activities. Communication causes positive impact on consumers' attitudes of the credibility of marketing activities.

Social media use has a significant direct positive effect on attitudes towards marketing with social media ($\gamma = 0.323$, $p < 0.05$). H7 is supported. The more people use social media the more positive attitude they have towards hotel marketing activities. If highly involved users can be identified, they can act as opinion leaders for hotel marketing initiatives. It is therefore important for hotels to targeted early social media marking campaigns to them. This may have a multiplier effect and improved word of mouth advertising as they can pass on their positive experiences from marketing to others.

Attachment was not found to have significant influence on attitudes towards marketing with social media, so H8 is not supported. Foresight about social media also, was not found to have significant influence on attitudes towards marketing with social media. H9 was neither supported.

Attitudes towards marketing with social media, has a direct positive effect on intention to perform Social Media Marketing Activities ($\beta = 0.219$, $p < 0.05$), so H10 is supported. Generally, the intention to perform a behavior is determined by the attitude to performing it. In this case, attitude refers to the degree to which a customer has a favorable or unfavorable evaluation or appraisal of social media marketing activities. Attitudes influence feelings, thoughts and the process of consumer decision-making (Bagozzi and Warshaw 1990). The more positive attitude the user has, the more possible to perform activities associated to marketing like booking or managing a booking through social media applications (Fig. 2).

5 Conclusions

Use of social media applications has exploded in the recent years. This explosion has created a domain of business interesting and offers unlimited marketing opportunities for businesses engaged in. Understanding of potential customers' attitudes towards social media marketing and their intention to perform social media marketing activities as booking or manage their booking online, are vital for marketers who are eager to utilize social media applications as a part of their marketing strategy.

The study proposes and validates a model for investigating the factors affecting the intention of customers to perform marketing activities through social media in the hotel industry. The study identified six factors that directly or indirectly influence intention to perform Social Media Marketing Activities. These factors are: Perceived ease of use, Perceived usefulness, Permission Based Acceptance, Fear about social media marketing, Social media Use, Attitudes towards marketing with social media.

The model can serve as a starting point for future research regarding social media marketing and it may be extended by using new constructs taking into consideration new trends in social media adoption and use and in the hospitality industry. The model raises fundamental issues that hotel managers, decision-makers and social media specialists should take into account to increase customers' intention to perform social media marketing activities, like booking using social media applications.

As time passes different life experiences, attitudes develop and mature and becoming stronger (Visser and Krosnick 1998). Thus, in contrast to other studies, the study provides some proof that trust to online hoteliers and risk avoidance do not affect directly or indirectly attitude towards social media marketing. As online transactions are increasing, people seem able to trust online transactions with hotels completely.

Ease of use and usefulness affects directly or indirectly Intention to perform Social Media Marketing Activities. This implies that hoteliers should create easy to use profiles and design effective pages on social media. Hoteliers must create informative exploring experience that ensures consumers' engagement. Cha (2009) claimed that the more people perceive useful and easy to use the shopping services on social media applications, the more likely they are to shop through social media. Kobsa (2007) highlighted the interest of Internet users in personalized services. If hotels pay more attention to offered personalized services through social media applications that will result in higher perceived usefulness, and customers are more likely to make a purchase (Liang et al. 2012).

Social Media Use has a fundamental role to attitude towards social media marketing. As people use more social media applications their attitudes towards social media marketing becomes more positive. Thus, managers need to identify these users and devise strategies such as giving special discounts to them in order to enhance their attitude, to get positive recommendations and next to perform more social media marketing activities. As consumers on social media are producing their own content, positive comments, likes, and photos may positively influence more users and motivate them and turn them from viewers to customers.

The paper offers a better understanding regarding the factors that affect customers' attitudes and intentions towards social media and could help businesses to design social media profiles that meet the needs of their customers. Despite the recent explosion of social media use, many businesses are in the early stages of exploiting the possibilities of social media applications for marketing purposes. Thus, conclusions of the paper can provide them with guidance to move forward. However, further research is needed; including qualitative research to shed some light on these findings.

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Chapter 27
Shaping the Consumers Behavior Who Are Using Airbnb—The Case of Airbnb's Users in Greece

Dimitrios Belias, Ioannis Rossidis and Efstathios Velissariou

Abstract Touristic services are traditionally provided by businesses such as hotels, taxis or tour operators. Recently, an increasing number of people suggest temporarily sharing what they own (for example, their home or car) or what they do (for example meals or excursions). This type of allocation is referred to as 'exchange economy'. It is not restricted to tourism and can be found in many areas of social and economic activity, although tourism has been one of the areas most affected. Sharing goods and services among people is not new. However, the development of the Internet and, consequently, the creation of on-line platforms has made sharing easier than ever. Over the last decade many management companies of such platforms have appeared on the market. A well-known example of a platform is one in which people can book an accommodation (Airbnb). The economy of the exchange has had a positive impact on tourism, as well as a negative one. Its supporters believe it provides easy access to a wide range of services that are often of higher quality and more accessible than those provided by traditional business partners. The paper has made a wide examination on the case of Airnbn in Greece and based on the existing literature it seems that there are some factors which differentiate it from traditional hotels, which is the interaction with the local culture. However, there is a need for further research on it.

Keywords Greece · Sharing economy · Airbnb · Consumer behavior · Tourism

JEL Classification L83 · M10 · R11 · R58

D. Belias (✉) · E. Velissariou
Department of Business Administration, Technological Educational Institute of Thessaly, Larissa, Greece
e-mail: dbelias@uth.gr

I. Rossidis
University of the Aegean, Mytilene, Greece

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1 Introduction

With the global economic downturn and increasing Internet confidence and online payments, there has been a significant shift towards accessing goods through their ownership. The tourism industry is the sector most affected by the rapid development of shared use and co-consumption.

One of the most critical developments in the hotel industry is the development of the sharing economy. With transactions being co-ordinated over the Internet and occurring between individuals, large brands in distinctive sectors have felt the financial impact of these online platforms on resource allocation. In recent years, this trend has evolved into highly profitable business models. For hoteliers, the opportunities and challenges that this market presents can make the difference between success and bankruptcy. The conventional hospitality experience is in question and tested in unthinkable ways just a few years ago. For hoteliers who embrace technological developments and understand the need for continuous improvement from the experience of visitors, this opportunity is acceptable.

Sharing is inherent and intuitive and is inextricably linked to the evolution of human development. Sharing is one of the oldest human behaviors (Rinne et al. 2015). The world population has established itself in the dominant property culture. The emerging business model of the exchange economy is a broad trend that affects every field of society and business. In the economy of exchange referred to as "collective consumption" – the consumers have the power to deal directly with each other, a disruptive collective behavior that redefines traditional market relationships and already affects ubiquitous business models of production, distribution and consumption. The economy of exchange is not a temporary trend, but rather "a strong cultural and economic power not to discover just what we consume but how we consume, an effective transition from an ego culture to a culture of we".

The economy of exchange goes far beyond the hospitality industry. The rapid growth of this economic model is a global phenomenon and covers a wide range of products and services. Companies such as Zipcar and Pro belong to the ecosystem. Airbnb, which has opened the way to hosting hospitality, is subject to competition and is no longer the only player. HomeAway, Wimdu and 9Flats have also penetrated traditional hotel experience. The aim of this paper is to go deep into the case of the consumers' behaviour towards airbnb in Greece. It is a topic which has not been widely researched and surely this paper will give value. The paper aims on referring the use of airbnb in Greece and the use of sharing economy in Greece, with emphasis on the consumers' behaviour. This is a literature review which will rely on the existing theory and papers. The research's expected results is to give some fresh glance over who consumes behave towards airbnb.

2 Literature Review

2.1 Definition of Sharing Economy

While people have shared their resources for thousands of years, sharing isomony is a new concept. It has emerged in recent years, and its growth has been caused by a number of factors, namely the recent economic downturn that has led citizens to look for chHOUer goods and services. The increasing need for community involvement in the decoupled world, greater awareness of environmental issues and technological developments involving affiliated shareholders who are not personally aware (Gansky 2010). Technological progress has been central to the development of the exchange economy as it has facilitated the reduction of transaction costs. In fact, the distinction between "traditional" sharing and the exchange economy is the use of ICT (Belk 2014). The exchange economy is currently increasing by 25% per year. In 2013, its value exceeded $3.5 billion (Dubois et al. 2014). It has been called the incumbent's disrupter for its significant and growing market share.

The exchange is "the most universal form of human economic behavior, distinct and more fundamental than reciprocity, exchange has probably the most basic form of economic distribution in human societies for several hundred thousand years" (Belk 2014: 715). Thus, sharing is not a new phenomenon. However, the economy of sharing is a new form of exchange that has emerged in recent years. The basis of the economy of the exchange economy is a kind of "zero sum" of the sharing of natural objects. The difference between "traditional" exchange and the economy of sharing is the exploitation of modern information technology.

A PwC report on the exchange economy (PwC 2015: 5) used the following definition: "exchange economies allow individuals and groups to make money by making good use of assets," underlining economic growth and use excess resources. Botsman (2013) distinguishes between the exchange economy and the peer economy. It defines the sharing economy as "an economic model based on the exchange of unused assets from spaces to skills for things for monetary or non-monetary benefits". However, this definition was accused of being "too broad" (Belk 2014: 1597). Schor (2015) described the following definition: "the exchange economy is face-to-face, facilitated by digital platforms" (page 14). Although Schor (2015) talks about economic activity, it also includes platforms that do not involve any exchange of money, and points out that when owners make profits, they are no longer sharing a rent. It underlines that some non-profit platforms are for sharing only. However, profitable, innovative platforms are growing faster because they mobilize their users financially.

2.2 Incentives to Participate in Accommodation Exchange Platforms

Botsman and Rogers (2010) argue that participation in exchange platforms creates "social capital" as it enables members to share their culture and gain intercultural experiences. "Social capital" is defined as "trust, norms and networks that can improve the efficiency of society by facilitating coordinated action" (Botsman and Rogers 2011). The authors believe that social capital is an important reason why people share platforms. A study by Flåt and von der Fehr (2012) on non-proprietary consumption collected incentives from a number of studies. The factors that are relevant to the accommodation exchange platforms are: perceived economic profit, variety and experience they seek, image and orientation, and ecology.

The division of platforms into non-profit, mutual and rental platforms is supported by the results of a series of studies on the incentives for users to join common platforms. These studies show that members are on platforms for different reasons. Overall, their motives are grouped into inherent, social and environmental and practical needs and economic benefits. Incentive factors vary depending on what is shared and whether the user is a debtor or a lender. However, while studies have been conducted on specific sharing platforms, to date, no comparative study has dealt with this issue. Differences in the methods used in these studies do not allow the results to be compared (Botsman and Rogers 2010).

2.3 Airbnb, the Short for "Airbed and Breakfast"

Airbnb, the short for "Airbed and Breakfast", is a global online community rental market for accommodation. Airbnb describes itself as a "trusted community market" for people to record, discover and book, unique accommodation around the world, and is an example of a peer-to-peer market (P2P) in the sharing economy. Future hosts list their free rooms or apartments on the Airbnb platform, create their own nightly, weekly or monthly rates, and present and offer accommodation to guests. Unlike traditional accommodation companies, Airbnb does not own its own rooms but provides a platform for people to record or close accommodations. Airbnb is traded as a social experience where the traveler will have the opportunity to "live like the locals" (Williams et al. 2015).

The spectacular development of Airbnb and similar initiatives is still very recent to be fully reflected in the academic literature. In general, a limited number of studies either study the phenomenon as a showcase of the emerging "common economy", or analyze specific features of supply: its business model and subversive results, consumer acceptance and trust, positive and negative impacts on city destinations and regulatory issues.

If the studies on Airbnb are considered as part of the networked economy, two explanations for its success dominate: Ideal motivation and, in particular, the authenticity of P2P contact to the experience of the accommodation market, on the one hand, and financial benefits for guests and visitors, on the other hand, and other P2P trips are categorized by Botsman and Rogers (2010) as examples of "Cooperative Lifestyles" combining the "benefits of ownership with reduced personal cost and cost, and amiloteres environmental impact. " The desire for social interaction is often seen as the main driver of the development of the phenomenon. Airbnb earns revenue from both guests and guests for this service: guests pay 9–12% service fees for each booking depending on the duration of their stay and the hosts pay a 3% service fee for to cover the cost of processing the payments. The higher the subset, that's it lower is the end. Airbnb charges are not refunded unless the server cancels it. A property listed on Airbnb is called "listing", a member of the Airbnb community who records its assets or its owner is called a "host" and a member of the Airbnb community holding a property is called "visitor". Since its inception in 2008, Airbnb's online market has grown rapidly, with over two million owners worldwide and more than 50 million visitors using the service (Williams et al. 2015).

Airbnb's business model currently operates with few regulatory controls in most locations, and as a result, guests are encouraged to use signaling mechanisms to build trust and maximize the likelihood of a successful detention (Alba 2015). To enhance this behavior, Airbnb has created an electronic reputation system that allows and encourages participants to evaluate and review each completed stay. Guests use star ratings to assess the characteristics of their stay, e.g. cleanliness, location and communication, while both guests and hosts are encouraged to publish public reviews of each platform stay (Caufield 2010).

There is limited information on user demographics, but in 2012 Airbnb reported that about 40% of its visitors were Americans, with Europeans being the majority of the rest (Taylor 2012). At that time, more than half of its catalogs were in Europe and a little over a quarter was in North America, and at the beginning of 2015 the company confirmed that more than half of its catalogs were still in Europe (Shead 2015). Also, an Airbnb report on her performance in the summer of 2015 indicated that the average age of the guests was 35 (Airbnb 2015), which is consistent with a previous survey that the average age of hospitality was 36 (Williams 2014).

2.4 *Airnb's Business Model*

Despite the significant growth and capabilities of this new industry, Herb is facing several strategic issues. Airbnb lacks a viable competitive advantage, faces a large influx of new competitors and also addresses multiple legal and market confidence issues. Airbnb has to set the direction to move forward or risk losing its competitive position in this emerging industry (Newcomer and Chang 2016).

By allowing free entry and free access to list properties, Airbnb quickly overcame the original mobilization barrier and attracted dedicated visitors and hosts. Users are free to browse as they please and are only required to pay a service fee when making a reservation, allowing Airbnb to maximize the number of possible transactions. Airbnb has expanded into its first asset, focusing on customer service and satisfaction. Creating a reputation for personalization, trustworthiness and trust, Airbnb attracted users who really believed in the value of the brand that the company created. To create this ecosystem, Airbnb used transaction revenue to implement systems such as improved customer verification, $ million theft/loss insurance, authentic customer reviews, and social connections. All of these factors helped Airbnb create a highly scaled business model that led to many promising economic returns (Coldwell 2016).

For visitors, Airbnb is primarily a low cost option. The hosts of Airbnb are also ranked first or significantly by economic agents. This financial incentive does not run counter to the social or environmental advantages that consumers can use to share. However, an important aspect is to look into the future of Airbnb is whether its economic impact will still be that "people need to buy less goods while at the same time they have access to the services of these goods" (Guttentag 2015).

This economic aspect is essential to Airbnb's business model. P2P rentals follow the same business models as traditional B & B, apart from the community's impact and the promotional advantage of Airbnb's global platform. Compared to hotels, Airbnb offers hospitality at competitive pricing, because in the case of private homes, fixed costs such as rent and electricity are already covered due to minimum labor costs, while Airbnb's income is usually an additional income, and stays are usually not taxed. The business model of the platform itself is based on commissions paid by visitors (6–12%) and hosts (3%), (Guttentag 2015).

Therefore, P2P housing can be considered as a two-sided market in which platform facilitates and gives value to both sides, bringing buyers and sellers 'on board'.) Pricing favors or "subsidizes" the host side of the case or Airbnb as part of the company's growth strategy: vendors are motivated to join the network, maximizing their attractiveness for applicants for housing. Unlike most traditional companies, models, in the case of dual-sided platforms, lead to increasing scale returns as users pay more for access to a larger network (Eisenmann 2006). Therefore, it does not surprise the fact of this platform as it continues to add listings to its offer (currently 1.5 million) and this shows a continuous and explosive growth (Newcomer and Chang 2016).

To operate this business model, Airbnb had to address three key issues: bringing guests and hosts in touch, avoiding a direct negotiation and creating confidence as a prerequisite for transactions to take place. Marketing is the one that defines Airbnb from the traditional holiday rental market. The philosophy of "sharing" and the image of a warm and authentic community - as it is mainly broadcast on television testimonies—was indispensable to persuade hosts and guests to join the network. But at the same time, direct trade between the two parties had to be avoided as this would lead to a unilateral business. The company does this directly through an algorithm that blocks messages containing phone numbers or e-mail addresses, offering services to facilitate transactions such as credit card payment, pricing tools, and insurance (Newcomer and Chang 2016).

More recently, Airbnb has examined the use of its own cleaning service (Lavler 2012). He offered free smoke alarms and carbon monoxide detectors in thousands of hosts Airbnb (2016). Launched an operation “Instant Booking” that allows making reservations to certain rents immediately without explicit approval from the host computer Airbnb (2016c) (which should not only help visitors with their accommodation choice but encourage optimal service by the hosts) and modified revision procedures to encourage more honest (i.e. less positive) revisions. The Airbnb has also spent many years experimenting with the potential to offer various activities and other travel experiences and services (e.g. guided tour, tasting drinks, bicycle rental and restaurant reservations) and obviously will officially launch the initiative by the end of 2016. In addition, Airbnb recently tried to attract business travelers, who represent a small percentage of visitors of Airbnb, creating a special business travel portal with personalized search results management tools and management and introducing a mark “Business Travel Ready”, which can be won by entries with certain characteristics (Newcomer and Chang 2016).

2.5 *The Development of Airbnb*

The company was founded by three recent university graduates in mid-2008, as mentioned above. The site initially offered only shared rooms and private rooms (but not entire houses) and focused on providing accommodation during major events, but the service quickly evolved into the broader apartment rental service as it is today (Botsman and Rogers 2010). Although popularity was limited early, by mid-2010 the company’s growth course started sharply upwards and from there it continues long ago. In February 2011, Airbnb reached a total of one million overnight stays, and by June 2011 Airbnb had booked 2 million nights, in January 2012 it had closed a total of five million nights and by June 2012 had closed a total of 10 Millions of Nights (Taylor 2012). At this point, probably due to increasing regulatory tensions, Airbnb stopped reporting the total booked booked nights and began to report the total number of visitors who had used the service. In July 2014, Airbnb reported that more than 17 million visitors had used the service, with over one million visitors using it each month (Friedman 2014). In January 2015, Airbnb reported that 30 million visitors had used the service, with nearly 20 million users only using it in 2014 (Chesky 2015). Later in 2015, the company reported that 17 million visitors had used Airbnb only in the summer of that year Airbnb (2015). In early 2016, the company reported that over 60 million visitors had used the service Airbnb (2016). And in the summer of 2016 Airbnb said that 100 million visitors had used the service (Chafkin and Newcomer 2016).

Along with the number of visitors, Airbnb’s listings Airbnb had 50,000 entries in late 2010, 200,000 entries in mid-2012, 300,000 registrations in early 2013, 500,000 registrations by the end of 2013, 800,000 entries by autumn 2014, more than one million entries until the end of 2010 end of 2014 Airbnb (2016), covering almost all countries of the world Airbnb (2016). Although one should remember that Airbnb's occupancy rate is lower than the hotel and that Airbnb's listings are not always available, it is still remarkable that Airbnb now offers more rooms than even the world's largest hotel companies. From an economic point of view, Airbnb remains a private company, which complicates valuations. A round of financing at the end of 2015 provided equity to investors at a valuation of USD 25.5 billion (Alba 2015), but these investment estimates tend to outweigh the real value of a company (Frier and Newcomer 2015).

3 Methodology

The methodology used in the present paper is the critical review of the literature.

The sources of relevant literature investigation derived from popular online bibliographic databases, such as Science Direct, Emerald, EBSCO host and scientific search engines such as Google Scholar and Scirus. General search engines such as Google have also been examined.

The types of bibliographic sources included in the research are articles published on scientific journals, books, conference proceedings, company papers and studies, white papers, online sites and online journals. The selection criteria of these literature sources were based on the relevance to the topic of the paper and this research is not exhaustive.

4 Discussion—The Consumers' Behavior and Attitudes Towards Airbnb

The operation of airbnb started in America and soon expanded around the world. It should be stressed that in recent years we have seen the development of many platforms in transport and tourism services based on the consumer's ability to come —via the platform—into contact with the service provider but mainly to evaluate the service and share the evaluation with the public. This is a particular element of differentiation that causes the service provider to enter into a process of continuous improvement and upgrading of services (Möhlmann 2015). One such example is the Beat (former taxibeat) that managed to change the way the taxi industry operates, although it has encountered great resistance. The fact that consumers could evaluate the professional motorist was an element that boosted the industry, but also a point of friction with trade unionists.

The fact that users can choose an apartment at a very low cost is a key incentive to choose accommodation from the airbnb. Concerning the satisfaction and choice criteria of an accommodation in the airbnb, elements such as price and value, cleanliness, relevance of what is described in the real estate description as well as assessment by other users are key factors affecting the satisfaction of users in the airbnb (Tussyadiah 2016). The study by Liang (2015) states that critical factors of satisfaction are consumers' perception of how authentic the accommodation is. This means that the aesthetics and the elements inside the accommodation (furniture, brightness, view, etc.) will judge satisfaction. Also other items mentioned are the word of mouth from other guests and the price sensitivity (prince sensitivity) depending on the prices of the other accommodation that the platform has in the same area as well as the hotel prices. At this point it should be stressed that there are two basic selection variables. The first is the price. Although there are many factors that influence the choice of accommodation in the airbnb as well as the percentage of satisfaction, the price is the basic criterion. If the user believes that the accommodation matches the price given then he/she will say satisfied. The second element is the trends. Airbnb has been dynamically in place as a fashion for many young people who want to travel to the world at a low cost but also with a satisfactory level of service (Priporas et al. 2017). It should be noted that the efficiency of airbnb is judged by the fact that for 2017 its value amounts to 10 billion dollars and its capitalization is higher than that of Hyatt, one of the largest hotel chains in the world (Apostolopoulos 2017). The study by Forno and Garibaldi (2015) states that in America alone for 2018 there will be 5 million overnight stays via airbnb while 2800 jobs and 450 million revenue from the hotel industry are threatened, as well as 108 million from the focus market. The study by Dubois et al. (2014) goes a step further and states that the use of airbnb adversely affects the indirect revenues of hotels, such as the use of luggage charges, the cost of cancellation of reservations, events, tips, use of telephone and other services, etc. The same study states that for every 10% increase in the size of airbnb, a 2% to 3% reduction in the hotel industry should be expected. There are also revenue losses for the state. Only for the state of New York it was estimated that in 2014 it lost revenue of the order of 226 million dollars due to the tax on bookings made through airbnb are different from those of hotels. Total housing and state rents in New York state are $2.1 billion (Dubois et al. 2014). Another article refers to a phenomenon recorded in Greece (mainly in Rethymno, Chania and some areas in the center of Athens), which is that the concentration of airbnb uses in very specific geographic areas reduces the supply of free real estate resulting in the difficulty of finding rental housing and rising prices (Staff Writer 2015). Of course, it should be noted that this is the function of the market and certainly since real estate owners can make revenue and boom the local economy, then hotels and the state should adapt to this new reality. Indeed, the study by Dubois et al. (2014) refers to the fact that those most affected by airbnb are lower-end hotels as well as hotels with no business facilities. On the contrary, hotels that are from 3 stars or more are not affected. The reason is because the airbnb audience is mainly people up to 40 years of low income that if there was no airbnb did not travel or would choose a more economical destination. This also shows that airbnb is not as hostile to the hotel industry as some believe. On the contrary, it provides opportunities for tourists to stay longer in a destination with the corresponding benefits for local businesses. At the same time, a tourist who has medium or high incomes will prefer a good hotel for the number of services he can offer. As for the consumer himself, the study by Einav et al. (2016) notes that there are significant benefits. These are (A) for low- and middle-income consumers that they can find a cost-effective solution to the city center and (b) the fact that airbnb has the effect of lowering accommodation prices or creating better deals. For the Greek environment, the relevant studies are limited. Although there are many newspapers, there is no scientifically validated study of the effect of airbnb on the economy but also on the consumer profile. Some relevant studies have been identified only on few postgraduate theses. Rousidou (2016) says that the reasons for using aibrnb in Greece are low cost, personal contact, ease of booking even in times of high demand, and the fact that there are many available homes in areas where there are no hotels. Consumers recognize that airbnb is a low cost experience and value value for money, which is a serious asset of airbnb booking. A particular feature is cultural experience. A study made by Rupa (2017) was conducted on a sample of 435 participants and concerns attitudes and perceptions of the general population about airbnb. Research has shown that the public has positive attitudes but also a high degree of satisfaction from those who have used it. Finally, Gardelaki's study (2017) states that incentives for consumers are mainly economic. The focus of the study by Garedelakis (2017) is in the institutional and fiscal framework with a focus on Law 4446/2016. Property owners and users seem unhappy, while on the other hand, tourism professionals and taxpayers seem to be happy. Their proposals are also different with the owners being in favor of the business and ensuring a good income, as their properties are already overpriced, while market professionals and taxpayers welcome the case of increased state intervention, which in a critical way only problems will create more recession. We should not forget that the issue is economic growth and wealth creation, not the extra burden of real estate. In relation to the international environment, although the studies are also limited, they allow us to have a first picture of the satisfaction of the public. The study by Priporas et al. (2017) was conducted on a sample of 202 airbnb users in Phuket. Research shows that there is a particularly high level of satisfaction, while inductive measurements show that there is a direct link between quality of service, satisfaction from staying in airbnb accommodation and loyalty. The survey also showed that when the owner of the property is of particular interest to his guests as well as an understanding of their needs, the level of satisfaction is also increased. The study by Bae et al. (2017) refers to the understanding of how to make the decision to book via airbnb and the effect of both pre-and post-trip experiences. The survey was conducted on a sample of 411 users from Korea, and findings show that the experiences of other users influence the decision to book via airbnb, while the trend is for users to share their experiences with other users after the completion of the detention. So the user experience is a critical factor in assessing services in the airbnb, while it should be noted that in the majority of the users they want to share their experiences on the internet. Finally, the research by Hamari et al. (2016) studies the incentives for consumer participation in the sharing economy. We must emphasize that incentives can be divided into three categories. The first is sustainability, which is the fact that a reservation on platforms like airbnb does not burden the environmental footprint, nor does it disturb the social fabric as it is with large hotel units. The second category is the enjoyment of activity. In most cases, these covers are part of the city's web and allow the visitor to see its true image. Finally, the third category is financial incentives and especially the low cost of living.

5 Discussion—The Consumers' Behavior and Attitudes Towards Airbnb

The emergence of multi—faceted technology platforms collectively known as "Sharing economy" has allowed individuals to jointly use stock deployments through shared wage sharing. The consumers have enthusiastically adopted the services offered by Airbnb, Uber, Lyft and TaskRabbit. The rapid development of peer-to-peer platforms has helped their ability to specialize in offering virtually no friction, as well as the rich choice of products and services they offer. For example, Airbnb, a travel agent provider and pioneer in the joint economy, has served more than 30 million visitors since it was established in 2008. Although Airbnb remains private, its valuation exceeds $10 billion today, established world-class hotel chains such as the Hyatt. However, incumbents, despite the fact that they face higher marginal costs and offer less personalized products than peer-to-peer platforms, have downplayed competition from platforms such as Airbnb (Forno and Garibaldi 2015;). It is estimated that hotels are losing about $450 million annually to AirBnb. From September 2014 to August 2015, 480,000 nights stayed in hotel rooms, while more than 2.8 million nights were booked on Airbnb. By 2018, it is estimated that Airbnb's overnight stays will reach 5 million a year. It is clear that the rental of holiday rooms and homes has reduced the demand for traditional hotel rooms. In addition, many hotel employees are losing their jobs due to these declining demands. Airbnbs have less labor force than hotels because they do not need the same level of service. Over 2800 jobs are directly lost to Airbnb, a loss of over $200 million in income for hotel employees (Feldman and Chuang, 2005). Less demand for hotel rooms adds an extra negative effect to hotels and their employees. When guests choose not to stay in a hotel, the money they spend on food and drinks in the hotel's restaurant and bar is likely to be spent elsewhere. As a result, the hotel loses the revenue it would have received differently from it. In total, more than $108 million in food and beverage revenues ($88 million for food and $20 million for drinks) are lost because travelers choose to book with Airbnb (Forno and Garibaldi 2015). The issue is not only about food and drinks that are lost when you look once again at the other services and the incidental income that can be used by the visitor while staying in a hotel, i.e. SPA, business center, late check out, last minute cancellation fees, event fees, luggage transfers, all these services and many more are likely to be spent elsewhere or saved because they are not spending because the host will not offer such services, it is unnecessary to undergo lost revenues (Dubois et al. 2014; Katsoni 2017). From the research made, it is understood that the consumers who are using airbnb in Greece indicate that they have a high level of satisfaction. An important aspect is that motives for using airbnb in Greece and elsewhere seem to differ from hotels and other facilities. For example, in airbnb consumers are mostly going behind the experience of interacting with the society (intercultural interaction) while the personal touch with the host is a key motive. This means provides us a glance for a future empirical research by focusing on those differences. Probably, a combination of a qualitative and a quantitative research would help us a lot to understand what are the differences on the buyer's behaviour between the traditional tourist and those who are using airbnb.

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Chapter 28
Towards Developing Smart Cities: Evidence from GIS Analysis on Tourists' Behavior Using Social Network Data in the City of Athens

Athanasios Koutras, Ioannis A. Nikas and Alkiviadis Panagopoulos

Abstract The evolution of web along with the technological explosion in web technologies and social networks has made internet a "place" where someone can post his/her tourist digitalized experiences easily, while these are made available and accessed worldwide almost instantly. In addition, such information is usually associated with features related to users' location and temporal position. This rapid development gives the motive for the creation of smart cities and corresponding smart tourism ecosystems. In this work, a density-based spatial clustering method is applied on posts from photo-sharing social media, to analyze geo-tagged data emanating from an urban area. The aim of this research is mainly to reveal the most important spots in well-known landmarks inside an urban area, and explore the visiting tendencies of tourists of these spots. The proposed method was applied on the city of Athens, and our results are presented using data from the Flickr photo-sharing web service.

Keywords Smart tourism · Social media analytics · Spatial-temporal analysis · Cluster analysis

JEL Classification C38 · C55 · L83 · Z32

A. Koutras (✉)
Department of Informatics and Mass Media, Technical Educational Institute of Western Greece, Patra, Greece
e-mail: koutras@teiwest.gr

I. A. Nikas · A. Panagopoulos
Department of Tourism Management, Technical Educational Institute of Western Greece, Patra, Greece

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1 Introduction

The importance of Information and Communications Technologies (ICTs) in the distribution of tourism product is indisputable and seems to be an inevitable step towards the future of tourism development. This can be vividly experienced in urban areas. Cities as tourism destinations should be highly competitive and beyond that should co-create their tourism products along with their potential visitors (Smith 2015; Buhalis 2000). Furthermore, the available urban touristic resources, as well local infrastructures should be efficiently managed and routed under the visitors and native citizens demands and needs (Bădiţă 2013; Smith 2015).

The importance of ICTs in the functionality of a city as a tourism destination has resulted the notion of smart tourism and consequently the necessity for developing smart cities. The exact definitions of "smart tourism" and its derivatives are currently active issues for discussion and research (e.g. Gretzel et al. 2015a; Li et al. 2017). However, its continuously development motivates researchers to establish some new ideas, where "digital ecosystems and smart business networks" are combined to develop notions like Smart Tourism Ecosystems (Gretzel et al. 2015b). These kinds of environments allow tourism stakeholders to elevate and enrich their services using the existing city's digital environment (Gretzel et al. 2015b; Brandt et al. 2017).

The sustainability of these environments is crucially depended on the information regarding spatial-, as well as, temporal-oriented data. These data are usually related on visitors' habitudes, available infrastructures, urban landmarks etc. The official statistics provide accurate and reliable data, but present the drawback that they are published with a significance delay, so there is an inherent difficulty in extracting information about tourist behavior, especially in urban area environments (García-Palomares et al. 2015). In a smart city environment behavioral information is required and, ideally, should be accessed immediately. Furthermore, researchers are allowed to "cut" their dependence to official statistics (Shelton et al. 2015).

On the other hand, an enticing alternative is the available web information which is provided indirectly from social-network users. These data, in most cases are carrying attributes concerning temporal and spatial characteristics of user's activities all over the world. Social media-derived data constitute a source of value to a variety of tourism stakeholders, including tourism suppliers, destination marketing organizations (DMOs), and government agencies (Brandt et al. 2017).

In this direction, Brandt et al. (2017) modeled a Smart Tourism Environment which is based on social media analytics. Although, data originated from social media have been criticized on their reliability, representativeness, and the lack of theoretical background, they still offer a significant statistical alternative since big data datasets provide "a way to ask different kinds of questions than is possible with census data" (Shelton et al. 2015).

The analysis of social media data is not a new idea in tourism, but is an evolving field which needs further development and investigation. In this work, a set of web-originated data are collected and visualized based on their geolocation. Specifically, a set of published pictures in Flickr social network, concerning the city of Athens in Greece, are collected and based on their geolocation attributes they were visualized. A spatial analysis on these data revealed the main landmarks that Flickr users visit. Based on this discovery, a temporal analysis was performed that revealed tourists' visiting habits, as well their statistical trends. It is worth mentioning that for the city of Athens the resulted landmarks coincide with the city's main landmarks.

2 Literature Review

Web 2.0 popularization and development change partially its content as it become user driven (User-Generated Content) (Bruns 2007; Straumann et al. 2014). At the same time, all the users' devices (smartphones, GPS devices etc.) generate geolocated information, which, aptly, is named big (geo)data (García-Palomares et al. 2015). Nowadays, the most common source of producing geolocated data are social networks (Batty 2013), which can be employed in various ways (Kitchin 2013).

The overall tourism experience includes trip preparation to the end of the trip back at home, which this usually involves internet and social networks (Fotis et al. 2012; Leung et al. 2013; Zeng and Gerritsen 2014; Munar and Jacobsen 2014). So, geotagged data beyond the extraction of tourists' destination preferences and points of interest in an urban area (Paldino et al. 2015; Junker et al. 2017) can also be used as consulting material for future visitors (Buhalis and Law 2008; Xiang and Gretzel 2010).

Several studies have developed to analyze social media data in connection with tourism activity, using geo-tagged data sourced on web services like Flickr and Panoramio: Wood et al. (2013) used photographs to estimate number of visitors in tourism sites; Girardin et al. (2008) studied the tourists' behavior in Rome analyzing their flows between various points of interest; Popescu et al. (2009) identified places people were visited as well as the duration of their stay; Gavric et al. (2011) extract Berlin's preferred locations and tourist dynamics; Kisilevich et al. (2013) identify popular city landmarks and events; Kurashima et al. (2013) used geotagged photos as a sequence of visited locations and then they recommend travel routes between landmarks; De Choudhury et al. (2010) introduced the creation of automated travel itineraries aiming in creating meaningful travel itineraries for individuals and professionals; Mamei et al. (2010) also recommend personalized routes using tourist experiences, behavior and tastes; Lu et al. (2010) suggest tourist trips based on phot-sharing geodata; Li (2013) used geotagged photographs to approximate the optimal solution for tourists' multi-day and multi-stay travel planning using the Iterated Local Search heuristic algorithm; Tammet et al. (2013) they develop sightmap exploiting photos density; Koerbitz et al. (2013) approximate the overnight stays in Austria and compare their results with the official statistics; Straumann et al. (2014) distinguish and study foreign and domestic visitors in Zurich; Sun and Fan (2014) identify social events; García-Palomares et al. (2015) identify tourist hot spots in European metropolis using spatial statistical techniques to analyze location patterns.

The spatial-temporal analysis of these data constitutes, also, the main interest of this work.

3 Methodology

3.1 Experimental Setup

To collect our data for the analysis, we have used the Flickr (www.flickr.com) photo-sharing platform. Flickr offers publicly geo-tagged photo data to registered users via Flickr's Application Programming Interface (API) (www.flickr.com/services/api/) for non-commercial use. Among the photos that users upload to the platform, a great number is taken by tourists while they travel and visit places using GPS enabled photo cameras or smartphones. Picture information such as user name, geo-location of the photo, date and time that the photo was taken and uploaded, type of camera that was used, photo metadata, photo EXIF data, etc., can be queried and retrieved using requests in REST, XML-RPC or SOAP format. The platform's API response formats include REST, XML-RPC, SOAP, JSON, or PHP depending on the developer's request. In this work, we used REST requests to the API, while the responses were returned in JSON format.

To collect pictures for our experiments, we have used the flickr.photos.search method that provides a great number of optional arguments that can be used to narrow our search spatially as well as temporally. For the first case, a user has the choice of querying for pictures taken inside a geographic area in the form of a rectangle bounding box with user-defined bottom-left and top-right corner of the box. Additionally, the API offers the choice of including temporal information in the query as the user can define the minimum and maximum date that pictures were taken.

To extract photos using the Flickr API, we have written a script in PHP language using the following parameters in our query:

1. **Area of interest**: since we want to study visitors of the city of Athens, we define a bounding box with long/lat 23.5923,37.8058 (corner A), and 23.9178,38.1479 (corner B) that includes the city's administrative boundaries.
2. **Temporal period of interest:** we queried photos taken in the above area of interest in a period from 1/1/2009 to 15/10/2017.

Successful API calls return query results in JSON format. The results contain a rich amount of information about the photos, including photo ID, owner ID, photo title, photo geo-location (latitude and longitude), date that the picture was taken, date that the picture was uploaded, textual tags, as well as other type of information, such as the ID of the host server. Among the metadata, photo title, textual tags, and location are optionally provided by users, while the other fields (e.g., photo ID and server ID) are automatically filled by Flickr when the photos are uploaded. Location information is available for each metadata record, since we have only retrieved geotagged photos. For our analysis, only the owner ID, the date that the photo was taken, the time that the photo was taken, the latitude/longitude, and the place_ID of the photo were retained.

The total number of photos we collected was 201.100. All data were pre-processed prior to the analysis to initially remove multiple photos taken from the same user in the same location in a very short period of time (multiple pictures taken within a minute). Additionally, to exclude locals from tourists that are our main subject of interest, we searched for users who appear in the database for a period longer than one month (García-Palomares et al. 2015), we categorized them as locals and excluded them. After the preprocessing step, the final number of photos in the database was 193.554.

3.2 Experiments

The purpose of this work is to explore big data publicly available from the internet to extract information about tourist concentration in urban regions. Using exploratory data analysis techniques on photograph geolocation data inside specific areas, we want to find places of interest (POIs) within a city that show big concentration of visitors. To achieve this, we have applied clustering techniques on the geolocation data of our database.

Due to the large number of clustering methods that exist in the literature (K-means, fuzzy C-means, Neural Network based etc.), we have set the following four specifications that must be met by an algorithm in order to be chosen for the purpose of our analysis:

1. A clustering technique should be used that doesn't require a pre-determined number of clusters, rather it works in an unsupervised manner as the exact number of clusters (POIs) cannot be not known beforehand.
2. The clustering method should result in clusters with a user defined minimum distance to each other. This is important as it can help us find POIs nearer to or further away from each other inside the city boundaries.
3. The user can define the minimum number of members in every cluster and thus define the minimum desired concentration of tourists in every POI
4. The clustering method must be robust to noise and classify only the significant examples, rejecting any noisy data.

Taking the above specifications into consideration, the DBSCAN (Ester et al. 1996) is a density-based spatial clustering method and it is used in our experiments. It is configured by two parameters Eps, the search radius, and MinPts, the minimum number of points within the search radius. These two parameters together define a minimum density threshold, and clusters are identified at locations where the density of points is larger than the threshold.

For the selection of the parameters, different values of Eps and MinPts were tested. Parameter Eps is attributed to the scale of the regions that we want to cluster. A larger value results in broader POIs, while a smaller value creates smaller areas in the city. The second parameter MinPts defines the minimum number of points (cluster members) that is required to form a new cluster. A larger value of MinPts ensures higher significance for the detected clusters but may exclude some interesting different areas as it tends to unify them in a larger one. A smaller value of this parameter extracts more clusters but may also include noisy results.

In this paper, we have selected the value of Eps = 100 and MinPts = 2000 after experimentation that showed consistency in all our experiments.

4 Results

Application of the DBSCAN algorithm on the database, resulted in seven clusters that are shown in Fig. 1. Figure 1 has been created using the QGIS software (QGIS 2009). QGIS is a free and open source geographic visualization system that has been used by a large community to create, visualize, analyze and publish geospatial information in various applications that include but are not limited to tourist data, health data, etc. By inspection of this figure we can see that DBSCAN finds seven clusters covering the following areas inside the city of Athens: (a) Acropolis of Athens (b) Panepistimiou Street (c) Lycabettus Monument (d) Panathenaic Stadium

Fig. 1 DBSCAN algorithm applied on photo-sharing data from the city of Athens

Table 1 Results of the DBSCAN algorithm on Flickr geotagged photos in the city of Athens

Cluster	POI	Members
1	Acropolis of Athens	15 464
2	Panepistimiou Street	108511
3	Lycabettus Monument	1133
4	Panathenaic Stadium	21 416
5	Syntagma Square	12 658
6	Temple of Olympian Zeus	3743
7	National Archaeological Museum	2384
Noise		28 245

(e) Syntagma Square (f) Temple of Olympian Zeus and finally (g) National Archaeological Museum of Athens. The clusters with their members are shown in Table 1.

It is evident that the DBSCAN algorithm works very well and manages to cluster the geolocation data of the pictures into seven of the most important and well visited places of interest in the region of Athens. The above landmarks actually describe the city of Athens in its entity involving ancient monuments, as well as downtown important sites and buildings (www.visitgreece.gr).

To further analyze the POIs, we explored the temporal dynamics of each cluster. Using each photo’s date and time from the database, we explored the temporal tourist concentration in every POI using four different time scales: (a) hourly within a day (b) daily within a week (c) monthly within a year and finally (d) yearly within the time data were gathered (2009–2017).

The results of this analysis are shown in Figs. 2, 3, 4 and 5.

By closer inspection of these Figures, the following remarks can be drawn:

(a) **Acropolis of Athens:** *“Acropolis” is the site of some of the most important masterpieces of worldwide architecture and art, the most renowned of which is*

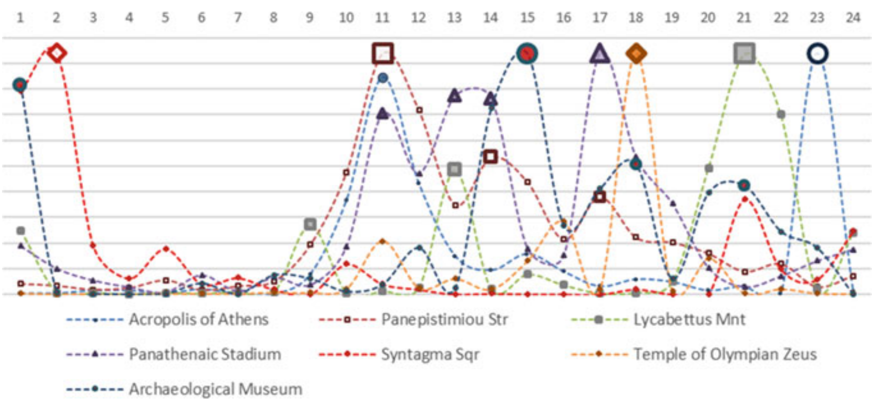

Fig. 2 Temporal tourist concentration in every POI using hourly time within a day scale

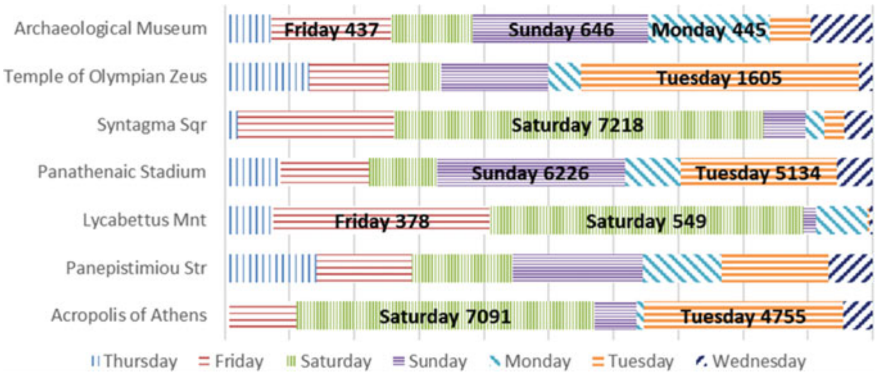

Fig. 3 Temporal tourist concentration in every POI using a daily within a week scale

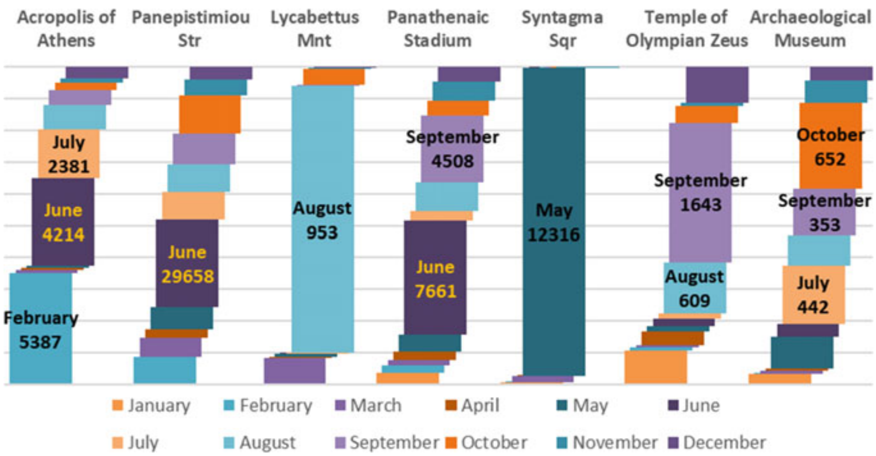

Fig. 4 Temporal tourist concentration in every POI using monthly within a year scale

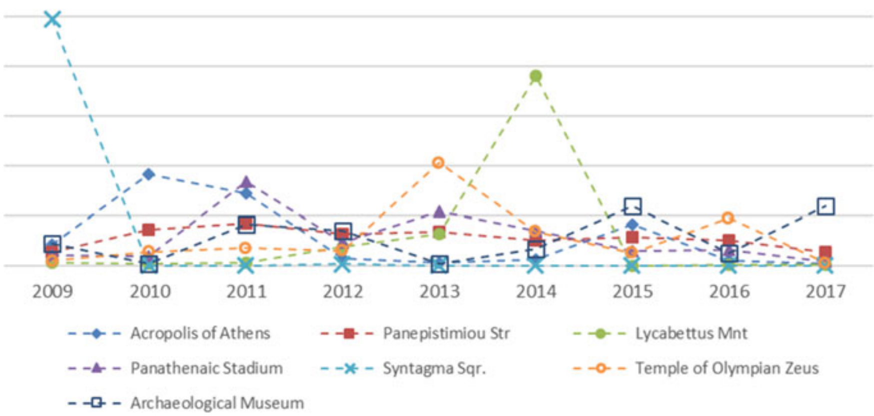

Fig. 5 Temporal tourist concentration in every POI using yearly within time data scale

the Parthenon temple. The Acropolis of Athens is mostly visited by tourists early in the morning 10–12 am and late at night, while a smaller group of visitors get there at around 3 pm. On a weekly basis, the days with the biggest crowd are Saturdays and Tuesdays, while on Mondays, Wednesdays and Thursdays, visits are very limited. Additionally, February, June and July are the months with the biggest attendance, while in January and April attendance is almost negligible.

(b) **Panepistimiou Street:** *Panepistimiou Street is a major street in Athens where some buildings of particular importance are there (some of them are Bank of Greece, the University of Athens, the Academy of Athens, the National Library, the Numismatic Museum, Titania Hotel, a part of the Grande Bretagne Hotel, and the Catholic Cathedral of Athens).* This area of the center of Athens shows a rise in concentration from early in the morning around 9 am until late in the evening 8 pm, with a peak value at 11–12 am. On a weekly basis, visits seem to be stable regardless the day, with an exception on Wednesdays. On a monthly basis, tourists visit this POI in all months with an exception of January.

(c) **Lycabettus Hill:** *Lycabettus Hill is the highest point of Athens which is known for nice view of the Acropolis, the Temple of Olympian Zeus, Panathenaic Stadium and the Ancient Agora*. Lycabettus Hill presents biggest tourist concentration in August during summer on the monthly scale, while most tourists choose to visit the hill Fridays and Saturdays, early in the morning (9–10 am), at lunch time (12–2 pm), or as most of this POI's visitors do, late at night 8–11 pm.

(d) **Panathenaic Stadium:** *The Panathenaikon (Kallimarmaro) Stadium is the old Olympic Stadium of Athens. It is the only stadium in the world built entirely of marble. The first Olympic Games in modern history were held there (1896).* Panathenaic Stadium similar to other open archaeological areas presents the biggest tourist concentration from early morning to late evening (9 am–8 pm) with a big decrease at 3 pm (coincides with the hottest time of a summer day). On a weekly basis, Sundays and Tuesdays are the two days with the most visitors, but in the other weekdays tourists also visit this premise as well. On a monthly scale, June and September are the months that present the most visitors.

(e) **Syntagma Square:** *Syntagma is the central square of Athens. It is located in front of the Old Royal Palace which is housing the Greek Parliament.* Syntagma square is mostly a place where people meet, with hotels nearby and the shopping streets around. Data analysis on the Syntagma cluster showed that most people visit the place from evening till late at night 8 pm–2 am almost exclusively on weekends (Friday night and Saturday night).

(f) **Temple of Olympian Zeus:** *The temple of Olympian Zeus was one of the largest temples in antiquity and close to Hadrian's Arch, which forms the symbolic entrance to the city*. This archaeological site presents the biggest concentration early in the morning 9–10 am or in the evening 5–8 pm. Tourist visits seem to be spread during all days of the week, with Tuesday being the busiest day. On the monthly basis, December–January, and August–September show the biggest proportion of the tourist attraction.

(g) **National Archaeological Museum:** *The National Archaeological Museum in Athens houses some of the most important artifacts from a variety of archaeological locations around Greece from prehistory to late antiquity.* The area inside and round the old Archaeological Museum of Athens shows a big concentration after 1 pm until the late night hours, especially on Saturday and Sunday during all year with a small exception in February and April.

5 Discussion

In this work a spatial-temporal analysis on geolocation data was presented. The used data came from Flick photo-sharing web service and concerns the city of Athens downtown, capital of Greece. The analysis was performed using a density-based spatial clustering algorithm (DBSCAN). The results of the algorithm were seven clusters corresponding to seven lively places in the city of Athens, as well as some patterns regarding foreigner visitors' temporal preferences.

This research is the primary stage of studying visitors' tendencies, since data from more social media should be considered and the correlation with the official statistics should be studied.

However, the city authorities should consider these studies (even in this primary stage) to provide up-to-date tourism information and improve the tourist flows in well-known POIs in the peak of day, week, month, or year, respectively. On the other hand, visiting voids in major landmarks should be a starting point for discussion and new strategic plans concerning all partners involved in tourism production aiming to increase, respectively, tourist flows in these POIs.

Finally, from the perspective of tourism product consumers, especially in urban environments, the availability of this kind of information will take the place of a "tourism flow regulator", giving them the opportunity to develop personalized visiting plans, thus improving their tourism experience.

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Chapter 29
Porto as a Smart Destination. A Qualitative Approach

Pedro Liberato, Elisa Alén and Dália Liberato

Abstract Tourism is a major export industry for many countries and cities (Romão et al. 2015), a context in which the city of Porto is increasingly included as an anchor destination in the Northern Region of Portugal. Also, the city of Porto has been reinforcing its position as a smart tourist destination by betting on the digital channels of dissemination of its heritage, resources and tourism products, on the one hand, as well as in communication channels with its real and potential demand, in different stages of the tourism experience, before, during and after. The intervention of the most important Destination Management Organizations in the region is crucial. The Regional Tourism Entity of Porto and North, regarding the distribution of the interactive tourist shops of Tourism, namely at the Airport, and also Porto Council's Tourism Department, concerning the support to the activity of companies in technological area and diversification of interaction in its primary communication channel, "visitporto.travel". This study intends to present a qualitative approach to the consideration of Porto as a Smart Destination, through the content analysis of conducted interviews with researchers related to the sector, information technology entrepreneurs and responsible for the main regional and municipal DMO's.

Keywords Porto · Tourism · Smart destination · Destination management organizations · ICT

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P. Liberato · D. Liberato (✉)
School of Hospitality and Tourism, Polytechnic Institute of Porto,
Vila do Conde, Portugal
e-mail: dalialib@esht.ipp.pt

E. Alén
Business Administration and Marketing, University of Vigo, Ourense, Spain

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1 Introduction

Porto, the capital of the northern region of Portugal is one of the oldest cities in Europe, with a historic center classified by Unesco as a World Heritage Site since 1996. Asa tourism destination it has increased its reputation internationally since it has been European Capital of Culture, in 2001, and due to the award of Best European Destination in 2012, 2014 and for the third time in 2017, by the "European Consumers Choice". Still in 2017, the municipality of Porto obtained the first place in live dimension, in Portugal City Brand Ranking.

2 Literature Review

The influence of technology offers new challenges and transformations in the tourism sector. To Soteriades and Avgeli (2007), in order to meet and to cope with the changes, the destinations must recognize the type of changes that occur to then respond proactively. According to Neuhofer et al. (2014) Information technology contributes to increasing competitiveness, improving information and communicating with the outside world. To Segittur (Sociedad Estatal para la Gestión de la Innovación y las Tecnologías Turísticas, S.A., Spain), a smart destination is a destination that is accessible to all, facilitates interaction and integration of the visitor with the surrounding space, increasing the quality of their experience in the destination. Implies: an innovative tourism space; vanguard technology; sustainable development; efficient management of resources; and competitiveness of the tourism sector; quality of the tourist experience; interaction, integration and accessibility. López and Garcia (2013) refer to a smart destination as an innovative destination anchored in advanced technological infrastructure, capable of ensuring the sustainable development of tourism. A smart destination should be able to encompass technological development, develop activities for innovation, incorporating these capabilities, digital spaces, information processing and tools that allow the transfer of technology and knowledge sharing. The destination must provide functionality and performance, with a view to increase the satisfaction of the tourist experience (Goeldner and Ritchie 2003), which is, among other things by the existence of tourist services customized online (Barta et al. 2009). Also Boes et al. (2015) consider that the research carried out in the context of smart tourism destinations, should, in response to increased competition between tourist destinations, focus on the distinction by the uniqueness and originality of its competitive advantages, including, as emphasized by Prats et al. (2008) the local community in this process.

Nowadays, through the information left by the track of the digital footprint of the user, it is possible to identify the profile of the tourists/visitors and automatically to create a plan of offer that adapts to each one (user), without him being conscious, about the data left by his traffic (Liang et al. 2017). According to Liberato et al. (2018), ICT and its development can bring about a number of benefits to the tourism industry. Technology can be used to promote tourist destinations where tourist activities can be publicized and marketed. Technology can also monitor tourist activities by supporting tourists before and during their stay at the respective destinations. It is up to the responsible for the management of tourism to increase the development of Smart Destinations, i.e., it is up to them to develop destinations that support innovation in technology, accessibility and sustainability. Special attention should be given to changes that occur in the needs of the market, triggered by technological innovations (Buhalis and Law 2008), and especially a new feature of the market, mobility and ubiquity allowed by the spread of smartphones and by the appearance of QR codes that contextualize the applications and mobile services and emphasize the importance of the strategy of destinations. On the other hand, free access to public data locations (Open Data), reinforces the raison d'être of the destination (Longhi et al. 2012). It is important to incorporate the technology in tourist activities in order to make the visit a breakthrough experience. According to Diamantopoulos and Siguaw (2000), the use of ICT results of efforts to correspond, in terms of service, the desires and preferences of consumers, improve the efficiency of operations, increase sales and revenue, minimize costs, in order to obtain competitive advantages, both in terms of leadership in price, both in terms of product differentiation, or even in terms of lower production costs. Camagni and Cappelo (2005) refer that the integration of ICT enables the extension of geographical horizons in terms of market, the implementation of the decision-making process and the development of new business. The provision of information emerges as one of the main factors of competitiveness of organizations, because it is with the information and the combination of information that organize the trips (Buhalis 2003). According to Ramos et al. (2009) it is fundamental to provide information about the demand/tourists, tourist destinations, facilities, availability, price, geographic information and climate, supply and transport, businesses, tourists, intermediaries and competitors, trends in the tourism market, facilities, availability, prices, tourist packages and competitors, trends, size and nature of tourist flows, as well as policies and development plans. There is a clear need to establish a direct relationship with customers, with their behavior, their preferences, needs, prioritizing the use of technologies. Some authors (Bénédicte et al. 2011; Buhalis and Law 2008; Ramos 2010) identify information and communication technologies such as those using the Internet and promote tourism organizations through the use of information systems such as Center reservation system (SRC), the GDS (Global Distribution System), and Customer Relationship Management (CRM). According to Werthner and Ricci (2004) The CRS/GDS are a tourist information network where market players and their economic relations are present, and these systems allow customers to choose more quickly the journeys, based on Tourist information available on booking systems, and enables companies to manage and plan their product online. Regarding CRM, say Özgener and Iraz (2006) that for tourism organizations constitutes an important strategy of technological applicability, since it has an important role in the relationship that the company establishes with the client, being sure that the use of CRM in tourism allows, according to the authors mentioned, the access to information on consumers; maintain and update the customer database, increase customer satisfaction, lower customer costs, enable a competitive advantage in acquiring online services, maximize profit, create a micro market according to customers' needs, create added value with customers through the services offered and speed of access to them, and sales management appropriate to the customers needs. In smart destinations the availability of the Internet to which several platforms and interactive digital instruments are associated, provides an integral system of information organization and management regarding the destination, allowing to establish permanent interactivity relationships among all actors, addressing the market, intermediates and tourists, in an individualized way, with key messages, products and services, and can guarantee independence both in the process of trip organization or in the course of the experience in the destination.

In Boes et al. (2015) perspective, the Smart Tourism Destination should, from the infrastructure for information and communication technologies and technological applications, remove competitive advantages to provide value creation and experiences for tourists/visitors, on the one hand, and competitiveness and profit for the destinations, on the other. The proposed framework is demonstrated for the dimensions of the tourist destination of Boes et al. (2015) based precisely on the ICT infrastructure and technological applications available. From the availability of existing infrastructures, Boes et al. (2015) consider that the smart tourist destination should consider four fundamental concepts, including the human capital (framing the needs of resident populations in the development strategy, involving educational strategies, creating new business opportunities for public participation and innovation); the leadership, which must be determined to bring intelligence to the regions (with the creation of sectorial offices associated with cities governance, for example, in environment, energy, and innovation areas, in order to facilitate the coordination of ideas and projects); the social capital (with collaboration and cooperation between different actors of society—citizens, public and private agents); and innovation (heavily influenced by the capacity of information and communication technologies, where you can call upon the collaboration of citizens, researchers, entrepreneurs, in the development of innovative projects that promote quality of life—urban planning, tourism, renewable energies,—attracting companies to the urban core areas involved). Then advanced ICT infrastructures, such as Cloud Computing and the Internet of things, will provide the essential infrastructure through a smart tourism destination development. In what concerns the city of Porto, the municipality is developing a triple helix model, with the participation of the Porto City Council, companies in the tourism sector and the university. Is also developing the store of the innovation project, which aims to bring together different actors with separate projects, in the sense of finding processes of improvement and achievement, based on innovative applications.

3 Methodology

It was applied a semi-structured interview to a set of persons and the respective script involved a set of items: representation on the development models to Porto; political and social representations on tourism; tourism policies and strategies; the city of Porto as smart destination. Duarte (2004) points out that the use of the interview in qualitative research is very usual. Moreover, the semi-structured interview was chosen because in addition to allowing a more adequate analysis of the data, it provides autonomy to obtain information that cannot otherwise be found. Anderson and Kanuka (2003) also underline that the interview is a single method in terms of data collection, once that is achieved through communication between subjects. The aim is to develop a qualitative and exploratory study, so the semi-structured interview seemed adequate in so far as it allows (Quivy and Campenhoudt 2003: 192) "(…) a real exchange, during which the interlocutor of the researcher expresses his perceptions of an event or a situation, his interpretations or experiences (…)". For this study were considered four categories of analysis, each divided into subcategories.

The major categories covered are: representation on the models of development to the city; political and social representations on tourism; tourism policies and strategies; the city of Porto as Smart Destination. Six interviews were performed (Table 1).

4 Results

Question 1: Development models for Porto

The Department of Tourism of the City Council of Porto emphasizes being (…) in a phase of passage of strategic thinking for the strategy, for the operation. The concern (…) in 2016 is to join three parts of what is the tourism sector today:

Table 1 List of interviewees

No.	Entity/Area/Function
E1	Tourism Municipal Department of Porto (Porto City Council)
E2	Porto and North of Portugal Tourism Entity University Professor and specialist in Tourism and Leisure
E3	Urban policy specialist University Professor, collaborates with CCDR-N, Xunta of Galicia, Coruña Superior Technical School of Architecture, Technical University of Barcelona, among others
E4	Territorial planning specialist University Professor, researcher and scientific reviewer in various international journals
E5	Manager of two technology companies for the tourism sector University Professor and specialist in Tourism and Leisure
E6	Software production and Development company manager, University Professor

Source: Compiled by the authors

Department of Tourism of the City Council, (…) that represents the host; The Porto Tourism Association, which has the external promotion; and Porto Tours which is an association of entrepreneurs from the North region, from which the City Council is also president. We are converging all interests, both public and private, in a single association. This is because we want entrepreneurs to concentrate their needs on a single entity, which they have to address (example: Open business, market products, build tourism projects). We want to streamline strategies and processes associated with tourism, not scattering the entities, but before promoting a concentration of same (E1). Public and private entities seek, together make the Porto city (…) the entrance door of the Northern Region and be the leader of the Northern region regarding the tourism economic activity. (…) and develop an appropriate policy to allow the city of Porto (…) to lead the region concerning to the external promotion (E1). It is important to develop a quality policy in order to (…) that the image that is being promoted in the external market, is the promise which is then returned to the customer. When the tourist arrives at Oporto city, must see what they received at the stage of promotion. If we want to promote a destination of quality, we need to be working, upstream for that quality as a fact (E1).

Tourism can be an important agent of the economic, social and cultural change of the city of Porto and the northern region of the country. As referred to one of the respondents the tourist activity is an economic activity relevant for its breadth and impact, highlighting still its transversal character. The city of Porto must be seen, by the local authorities and its inhabitants as a city of knowledge, of the heritage that evidences a glorious past, but it also has to be viewed, designed and planned in terms of the city with perspectives of the future. In general the respondents understand that tourism is a factor of development, not only of the city, but also of the region. According to one of the interviewees (E2) tourism, initially in a almost natural manner, and now increasingly structured and planned strategically, plays a very important role in the development of the city and the region. Despite being a factor of development of Porto and the region, it is necessary to have the notion that the products and features offered in the northern region are diverse (E4, E6). Tourism in the city of Porto is a factor of great development of the city and the region, what is noticeable through the increase of business related to tourism and leisure activities throughout the city, particularly at the level of supply of accommodation, as Hostels (geared toward young people who seek good price/quality ratio), and restore (international cuisine). Tourism must, therefore, be assumed as a strategic priority (E1, E2).

Question 2: Political and social representations on tourism

We have a sense of the responsibility we have, not only in growing, but of maintaining active growth. We have recorded annual balance sheets with a double-digit growth, we are very satisfied (E1). Oporto presents a positive balance in tourist terms. The tourism balance is lacking in depth planning and a strategy defined for its sustainability (E2, E6). Oporto has evolved since 2001 (coinciding with the European Culture Capital and beginning of the installation of the first low cost aviation company), especially in the last five years. The optimization of the river as a natural resource and optimization of the public space of the historical center of the city are key elements in the development of urban tourism. In addition the international Classification of the historic center as a World Heritage Site by UNESCO (E4). Tourism serves as an alert to improve the urban and social planning aspects of Porto. It's an important development engine. The response to the needs of tourists (national and/or foreign) allows to create, improve, recover as well as innovate in various physical infrastructures (accessibility) and natural (river, parks) as well as institutions (public, private). One should think about what the city has (or not) to offer, how it is prepared (or not) for this and what is intended to project as an idea of tourism (E4).

From the perspective of the tourism department of Porto City Council, this passed (…) to be a political priority, a development axis of the city. We understand tourism as a priority policy but also as a priority of development (…). It means that the strategy for the city and the strategy for tourism are inextricably linked. All policies of city, any portfolio, aim to create a city more comfortable for those who live here, but also for those who visit, linking also private and public companies (E1).

Question 3: Tourism policies and strategies

Oporto city is a rarity, and is therefore classified by Unesco. (…) The topography itself gives a great drama and a awesomeness that are unique. The so-called tourism in Porto is a polyhedron (E3).

It opens a new direction for tourism in Porto and that unequivocally should be leveraged into a common strategy, based on recovery, the strengthening and the harmonious development, innovative and technological destination (E2). The city has a lot of potential to offer to business tourism, wine tourism and health tourism. We should regard new audiences and driving promotional campaigns for business, oenology and the senior areas (E5). The new direction for tourism goes through the bet on digital marketing. There are also two other large betting areas with regard to promotion: support for industry agents, all promotional actions that private companies make in other countries, we try to leverage them (…), and yet the airline routes, that is, together with what is the investment of own airports in the acquisition and maintenance of routes—we do promotion and marketing actions with companies that want to leverage these routes (…). In summary, our promotion area relates to the Digital Marketing, agents of the sector, fam trips, press educational trips, airline routes, and fairs (E1).

There is also interest in bet on certain markets: Spain which is our biggest market, France who has grown a lot, Italy, which is recovering, United States, United Kingdom and Germany (E1). Notable is the growing use of the Internet and information and communication technologies in the market of travel and tourism, particularly at the level of promotion, making reservations for tourist services and the sharing of information and experiences. Applications such as Facebook, Instagram, Youtube, Twitter or Trip Advisor, constitute key channels in seeking information about a destination or tourist service. Tourism has strengthened the strategies of marketing and online promotion of products and tourist services. Tourism has strengthened the strategies of marketing and online promotion of products and tourist services. Reflected, since soon, at the level of communication with consumers, in all its aspects. Agile communication, easily perceptible and accessible. Reflected at the level of the tourism business sector, allowing a more sharp disclosure and loyalty, but also in the reduction of its costs, the level of energy efficiency, equipment and facilities available. Still reflected on accessibility in transport, in particular, the axes which unite the city of Porto to Galicia, medium-sized cities in the region, as well as the connection to the Douro river. Reflected, finally, on innovation and encourage creativity, while smart destination, friend of the environment and conducive to the interaction between the various valences of the city and the tourists (E2). The technology should be generating opportunities for economic development and strengthening of technological services available to the tourist activity (E4). The creation of innovative products in the area of new technologies requires the dynamics and capacity for initiative of companies. The city begins to observe the initiative of companies that create technology products to support the tourist. With companies attentive to the growth of tourism in the city of Porto will be the basis for the creation of a cluster of organizations interested in investing in this area (E5). There are projects with the University of Porto, such as the "Porto Digital". The Innovation department is mapping all the projects that exist and trying to give them a connection. The House of Innovation will be created, placed in some parts of the city, in a itinerant way. We will channel to this project, all the innovation projects, which are being developed, both in the area of education, tourism, among others, so that this is the showcase of these projects (E1). In tourism, what is most innovative is the observatory, and what we are developing is a beacon project that will use our tourist resource database. We joined a technology partner who gave the stores the ability to launch promotions, with alerts to the customers who pass by. We are creating a tourism observatory that allows us to perceive the areas of highest concentration of tourists in the city, and that also includes the Street Trade Observatory. The home of innovation has precisely this aim: to bring the street everything that is happening, in terms of information and technology, in order to facilitate the establishment of partnerships. When technology companies in initially tried to sell the APP's we gave them all the information that we had and we ask them for the development of technological projects to benefit the destination - the projects carried out much more quickly. The City Council is being promoter in the area of Big Data, but the department of tourism is connecting parts and give the innovation department the maximum inputs so that they are able to materialize and consolidate the projects (E1).

Question 4: The city of Oporto as Smart Destination

Porto is clearly a smart destination, belonging to the network of 25 "smart cities" of Portugal (E2). If we understand "smart destination" as an innovative tourist destination, consolidated on a technological infrastructure that facilitates the integration and interaction of the tourist with the territory tourist area, the city of Porto can already be considered as such (E5). The digital platform provided by the

Tourism Regional Entity, to all those who visit us, already located at various points in the region, with greater notoriety in Oporto Airport, the metropolitan network, the prohibition of road traffic in some arteries of the city, among others (E2). The radialization of the city and its infrastructures (airport, Metro, buses and train) and its integrations in the supply and uses of these services (E4). There have been developments in mobile applications with information about the city, in the image of what happens with many European cities. With regard to the websites about the city, we also notice a great improvement in terms of image and communication policy. In urban transport, some initiatives are also already in place to extend access to the Internet in order to keep the tourist always online (E5). In the area of transport there are some APP's such as: Porto GPS Metro, which allows you to obtain information concerning the network of Metro, through the consultation of the map, the lines, the Subway Stations and informations about the city. Once installed, the application may have useful information stored locally on the device. Through the GPS is displayed the itinerary of the place where the person is up to the nearest station. The APP "MOVE-ME" it is a prototype of an application that enables mobile access to a range of information on public transport, from different operators that serve the city of Porto, enabling the planning of intermodal routes. The Collective Transport Services of Porto (STCP) are the first bus company union to have a service wi-fi in the buses that circle the city of Porto. With regard to culture, art and events some of the projects developed are for example: the "Going Out Porto" it is a city guide with lists of recreational and cultural events (dance, music, exhibitions, theater and others) and the respective locations; "AroundPorto" allows access to all events in the downtown of the city of Porto; the "moveOporto" is a mobile guide to the city of Porto, with alternative sites elected by Insiders; ArchitecturalGuide—Portugal, in format "Travel guide" promotes the work of several architects, including the major part of the work of the two Portuguese who received the Pritzker Prize—Eduardo Souto de Moura and Álvaro Siza Vieira; The APP "Serralves" allows the tourist access to the entire offer of Serralves Foundation; The "Tour4D" takes the tourists to the best reference sites in 3D for each city. The tourist has the opportunity to view the locations of reference and read useful information about these, even before they get there; "OportoWorldTravel" Has the indicator "locate me" providing the tourist navigation based on location even in offline mode, and provides general information about the destination: History, Geography, Climate, Architecture, Monuments and Places of Reference, Culture, Economics, Demographics, Administration, Transport.

With regard to maps and guides stands out the "at a Glance" guides that include a selection of the most important points of interest. For each one of the points of interest is available a variety of information that can cover directions, contacts, email, location—to be located on the map, or to submit the path from the user's location, parking and the nearest metro stations nearby, an image, the classification of the editor and the prices of the tickets, among other important details. It is also possible to add this information to your own device address book—so that we don't need to add the information manually—as well as send information to other users by e-mail. All these information are included in the guides, so that the tourists don't need to download from the Internet. In the section “Categories”, the guides “At a Glance” allow you to sort the desired references by type, name, price, proximity or selection of editors, as well as filter, sort and search, in order to be able to easily find the point of interest sought. The categories are: history and culture; places to visit; Eating out; shopping; housing; nightlife. “AHI’s Offline Porto” is an application that allows to use maps of Porto (Portugal) offline without Internet connection and stores maps directly on the device, so that we don’t need to be connected to the Internet to be able to see; “Porto Walking Tours and Map” is an application (offline) that offers numerous walking tours to see the best of what exists in the city and has navigation features of tourist itineraries maps to lead tourists from one location to another. “Farol City Guides” is an application designed especially for business travelers that have some free time, after a meeting, to know the city, or for independent tourists wishing to make a trip to city break.

The technology is to our service and serves to improve the quality of our product. We’ve had great repercussion of markets where we didn’t expect. We know what people expect of us, what expectations have, how they felt after being served by us. We adjust the profiles. We understand the technology as an ally of information to support decision (E1). One must think individually in each of these elements in order to be able to think of its collective and thus facilitate the integration and interconnection of them in the city, as well as to meet the needs of tourist accessibility and mobility (E4).

We are faced with multiple needs and the triggering of processes susceptible to become projects. It is essential that such projects are, they all, steps necessary to the implementation of the sustainability and development of tourism in Porto (E2).

There is a set of projects to achieve and which can contribute to a higher growth of tourism. These projects include: the qualification of mobility, circuits, the professionalization of human resources in the sector. We are working the brand-official product, official website, to show the tourist that there are quality companies with ample concerns, and then there are the others. We’re spreading what we’re doing. We have to work on the hospitality. We have to work the other cities in the northern region. We are particularly concerned with the Douro region, in terms of product - make the connection with the two destinations, on the same product. We need to encourage the creation of different products in the destination (E1).

Today, in addition to thinking in this it is necessary to build the future. The technology is a part of our daily lives and is a fundamental part for architecting the future. Technology comes as a means that allows us to develop services more suited to people’s needs. Technologies play a key role nowadays in all sectors of society and the tourism sector does not escape this reality, thus emerging technologies as essential to the development of tourism in Porto, as an integral part of a strategy that passes through the assumption of the city as a smart destination (E2). On the one hand, the technology is an attraction for tourists, on the other hand, technology is considered as entertainment of tourists and finally a tool/development tool and support to tourism itself capable of creating employment, citizenship and economics (E4). The technologies are crucial in the development of tourism in Porto. There are applications that allow the tourist to explore the city independently, but these applications have to be improved either at the level of operability and at the level of content (E6).

The technologies have contributed to change the reality of tourism, enabling its development. The strategic options taken at the level of digital marketing by Turismo de Portugal and the consequent action which has been to make the regional entity, in the development of the digital platform for interaction with tourists, have been essential, as information technologies that increasingly have come to be used by several agents and tour operators (E2). The use of technology in the tourism sector has gone through several phases: the tourism sector in Oporto began, in a first stage, relate to the use of information technologies through the computerization of companies linked to tourism. In a second phase and already in the full era of the growth of the Internet companies have discovered the potential to make themselves known through websites of essentially informative character. In a third phase, with the emergence of web 2.0 companies have evolved to the area of interactivity, making use of social networks. Not only promoted their products and services as they had the opportunity to interact with their audiences. Currently there are companies extending the provision of services over the Internet contributing in this way to the creation of an Oporto city that can be seen as a smart destination (E5), as far as improving the level of digital tourism information and transport (E6).

The success of the growth of tourism in Porto, the increase in the number of tourists and the increasing number of reservations made through the Internet are, alongside the high scores and comments transmitted, a good indicator. It is known of the satisfaction, that talking about Oporto, that living in Oporto, that to enjoy new and increasing infrastructure, facilities, programs and events, represents a lot for its residents, who increasingly see themselves in the success of their city (E2). Tourists and residents perceive Oporto as a smart destination by the existence of technological applications (apps, electric bikes with urban maps, electric cars with pre-established pathways, …) (E4). Tourists are users who more perceive the city as a smart destination by the fact that before, during or after the trip have already used services that we can include this concept (E5). The tourists, and nowadays, also residents use the available applications, such as the digital tourist information, the interactive shops of tourism in the city, such as that of the airport Francisco Sá Carneiro, among other means available (E6).

5 Conclusion

In the context of the proposed research, it was intended, through a set of selected respondents, to evaluate Oporto as smart tourism destination. Strapazzon (2009, cited in Soares 2012: 10) says that "(…) the addition of intelligence in each subsystem of a city—transport, energy, education, health care, water, public safety, among others—has its relevance ensured, but they alone are not able to build smart cities". For the author mentioned to be able to develop a smart city is fundamental the involvement of people, as well as clarity of objectives. To build a smart destination, we must have a smart city. Its construction requires the use of intelligent technologies in each subsystem of the city or region, as well as is necessary to ensure quality, environmental, economic and social development, and quality of life for people.

In a general way, the interviewees make reference to the existence of policies directed to the development of tourism in the city of Porto, in a particular way, and in the Northern region in a general way. From the perspective of the department of tourism of the Porto City Council, the city is in a stage of transition from strategic thinking to the operation strategy. Through the policies that have been created there is a concern, (…) to develop the territory, (…) to develop the destination. Not (want to) develop them separately or in isolation, but (want to) develop the brand, create notoriety out there, and can be consumed by the tourist/visitor, when he arrives at Oporto. The interviewees make reference to tourism as a factor of extreme importance to Oporto and the Northern regiondevelopment. Generally, the interviewees understand that tourism occupies an important place in the organizational macrostructure of Porto. For the tourism department, the activity emerges as a political priority for the municipality of Porto, but also as a priority for development, since the city strategy and the tourism strategy are inextricably linked. All policies of city, in any department, aim to create a city more comfortable for those who live here, but also for those who visit. For the interviewees Oporto has many tourist potential. In respect of the course to follow, generally refers to the need to improve what already exists, of the need to seek new markets, a new type of tourist. It also makes reference to the need to invest in digital marketing.

For the majority of the interviewees, Oporto can already be considered as smart destination. Reference is made, for example, to the coverage of wifi access throughout the city, and the digital platform provided by the Tourism Regional Entity. In a general way the interviewees consider that the technologies are crucial to the development of tourism, not only with regard to the dissemination and promotion of the tourist destination, but also as a vehicle for the development of the city of Oporto as a smart destination. When asked about how the development of the tourism sector in Porto is related with the use of information technologies and opportunities for liaison with other organizations promoted by the use of the internet, some of the interviewees consider that, tourism can clearly benefit from an improvement in the level of digital touristic information provided. Tourists perceive, clearly, Oporto as smart destination, from the perspective of the respondents.

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Chapter 30
An Analysis of the Electronic Presence of National Parks in Greece

Aristotelis Martinis, Athena Papadatou and Katerina Kabassi

Abstract Greece is one of the richest countries in biodiversity and ecosystem diversity. Protected Areas and National Parks may constitute a key driver of sustainable development and economic revitalization of these areas. An important tool to attract visitors and provide environmental awareness to the public is Internet. Indeed, the quality of a website plays an important role on perception the visitors or potential visitors acquire about the management body of the protected area. In this paper, we make an analysis of the 26 websites of the National Parks that own a website and provide the concluding remarks on the electronic presence of national parks in Greece.

Keywords Website evaluation · Sustainable tourism

JEL Classification L86- Information and internet services · Computer software

1 Introduction

Global environmental problems and degradation of the natural environment and ecosystems have led the international community to create Protected Areas (PAs) and national parks. It is a decision that is today the most important institutional tool for preserving the natural and cultural heritage of each region (Papageorgiou 2005). The 4th World Congress on National Parks and Protected Areas defined national parks as natural areas to protect the ecological integrity of ecosystems and at the same time provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities (McNeely 1994). Initially, the creation of PAs in particularly remote areas, where the living standards of local communities were very low created conflicts with local communities because restrictive protection measures (Nyaupane and Poudel 2011). Lately, the authorities

A. Martinis (✉) · A. Papadatou · K. Kabassi
Department of Environment, Ionian University, Zakynthos, Greece
e-mail: aristotelismartinis@yahoo.gr

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have begun to plan measures, enabling local communities to use some natural resources, in order to financially empower local societies.

PAs constitute a key driver of sustainable development and economic revitalization of these areas. The idea that environmental protection and local development can be achieved simultaneously, has led the authorities to open PAs to recreational sustainable activities (Sebele 2010; Strickland-Murnro et al. 2010). Today, the tourism in PAs appears increasingly as an area appropriate for the physical and mental well-being of (often urban) visitors who reconnect with nature (Puhakka et al. 2017). The ecological values and the ecosystems services It has already been recognized by the international scientific community (studies of Badola et al. 2012; Uddin et al. 2013; Barbier 2014).

Ecotourism is a sustainable option to combine both conservation and development goals (Honey 1999). It is the form of tourism which promotes and highlights the natural and cultural heritage. The concept of ecotourism includes also environmental education and awareness of visitors and local communities, as well as the respect for cultural diversity and local values. (Boo 1991; Diamantis 1999; Goodwin 1996; Honey 1999; Lindberg and McKercher 1997; Weaver 2007). The International Ecotourism Society (TIES, 2007) defines ecotourism as: "[r]esponsible travel to natural areas that conserves the environment and improves the well-being of local people". Professionals support that ecotourism improves both the tourist destination and the living standards of the local community (Kruger 2005; Ormsby and Mannle 2006; Stem et al. 2003). A critical question, however, is whether the ecotourism projects themselves are on a sustainable path in terms of the triple bottom line of economic, environmental and socio-cultural development.

The growth of nature-based tourism has highlighted the PAs as important destinations (Dharmaratne et al. 2000). Of course, in many cases the growth of nature-based tourism there are conflicts between tourism and other development activities, the impacts of which degrade the environment (Becken and Job 2014; Liburd and Becken 2017), especially when the commercialization exceeds the carrying capacity and the naturalness of the area is eroded or destroyed (Saarinen 2016). Scottish national parks have already established a view to combining environmental management with a local rural development (Dower 1999).

The Taiwanese government, in order to promoted ecotourism as a way to attract more foreigners to visit national parks and understand ecology of these places, following current global trends, and in response to the request of the United Nations, chose 2002 as "The Year of Ecotourism in Taiwan," (Tao et al. 2004). Specifically, the visitor arrivals to Taiwanese national parks grew 20% within 4 years (Tsai 2010). Additionally, the evaluation of the websites of the parks had practical implications for the managers of national parks. By understanding a website's strengths and weaknesses and comparing these to other websites, the management body of the National Park can understand how to improve the status quo and the quality of websites (Tsai 2010).

An important tool to attract tourists is Internet. Internet and websites, thanks to their popularity, are a powerful tool than can be used to inform local society and the visitors on the role of the National Park, its ecological value, the restrictions for visitors, the ecotourism activities and contribute to informing and raising awareness, as well as to the financial support of the residents, which will result from green ecotourism development. Information to visitors today is made available mainly through the websites of the Management bodies (Ho and Chou-Yen 2003) Moreover, the content of tourism destination websites is particularly important because it directly leads to the creation and communication of the destination's perceived image, which produces a virtual experience for visitors (Doolin et al. 2002).

Greece is one of the richest countries in biodiversity and ecosystem diversity. Rich and diverse forest ecosystems, valleys, rivers, islands, lakes, mountains, sea, islands and remote islets, constitute the natural capital of Greece and the protected areas are the most important pieces, the jewels of this natural mosaic (Papageorgiou 2005). As a result, Greece has many PAs and national parks that attract several visitors each year. The national parks that have a website are 26. However, the quality of websites may vary considerably (Kabassi and Martinis 2017). In this paper, we make an analysis of the 26 websites of National Parks and provide the concluding remarks on the electronic presence of national parks in Greece.

2 National Parks in Greece

The creation of protected areas was based on National and European legislation and is a safeguard for the protection of the country's natural and cultural heritage. The National Protected Areas System in Greece consists of the national parks, nature protection areas and areas of absolute protection, while also including areas in the Natura 2000 network (based on the Birds Directive (2009/147/EC) and the Habitats Directive (92/43/EEC). In addition, it has established protection areas based on international treaties.

National parks, according to Greek legislation, are protected areas with the following aims: (1) the protection of the environment; (2) the promotion of scientific research and environmental education; (3) the provision of recreational opportunities; (4) the improvement of social and economic status of local people, by promoting the development of ecotourism and encouraging traditional patterns of land use and traditional occupations (Trakolis 1983, 1988). National parks, in addition to protecting biodiversity and natural ecosystems, play an important role in the economic development of generally degraded areas and, more generally, with the development of base-nature tourism, contribute to the national economy of the country. In order to achieve these goals, managers can plan the strategy and manage effectively (Chape et al. 2005; Redford and Taber 2000).

The management framework for the protected areas of our country is defined in Law 2742/1999, as supplemented by Law 3937/2011. The core responsibility of the management bodies is to monitor the species and habitats within their area of responsibility and implement the rules of procedure and management thereof. From the assessments on the operation of the management bodies and the effective management of the areas, it is shown that the problems are important but in most cases they stall. As a result, the scientific monitoring systems are not implemented and the areas become subject to threats and pressure. Another important element is the fact that the role of the management bodies is not yet recognized by society, which –with a few exceptions– has not understood the role of PAs. According to research conducted by the "Natura" 2000 Commission (September 2011), the Management Bodies are rarely occupied or not at all occupied with informing the local community (Natura 2000 Commission, September 2011). But there are some bodies that have invested in the sector of informing-raising awareness and are closer to the local society. Nevertheless, even if they have processed awareness programs, they haven't managed to convince the local society for the need of institutionalization of management schemes. The management bodies of protected areas have not achieved to make clear the relationship between the limitations that result from this and the opportunities emerging through this for the development of the area, employment and the new jobs created. The management bodies of the protected areas have not grasped the opportunity provided to operate as a tool of the said green development (Skopa 2012).

At present, 28 management bodies of protected areas are operating and have the right to provide their opinion on matters under their responsibility. 26 out of the 28 management bodies of PAs have an electronic presence on the Internet. The management bodies of PAs that own a website as well as the electronic addresses of those websites are presented in Table 1.

3 The Websites of National Parks

All the national parks' websites contain more or less information on the management body of the PA, the ecosystem, tourist information and some legislation, maps, contact form, as well as news (in the form of press releases, actions that may not shown in the calendar). There are national parks that have paid a lot of effort to design a website that it is friendly and usable with rich and up-to-date information while others do not consider their website really important. However, the website is the first impression a visitor gets when s/he wants to take some information on the national park and the protected areas.

Below we present a very short summary of each one of the 26 websites and then provide an analysis:

National Park of Schinias-Marathon

The website is visually pleasant and easy to navigate. It contains general information on the organization and the ecosystem, maps of the protected areas, volunteer application form, participation in actions and calendar. There is update on actions using press releases, but no past or future actions are shown in the calendar. The English version of the site, does not include the latest news. Useful links, contact form. Facebook and Google + buttons leading to their respective social media pages. Subscription to newsletter is available. But it has broken links to download files.

Table 1. The websites of National Parks of Greece

	Alternative	Website
1	National Park of Schinias-Marathon	http://www.npschiniasmarathon.gr/index.php/gr/
2	National Park of Koronia and Volvi Lakes	http://www.foreaskv.gr/
3	Northern Pindos National Park (of Vikos gorge-Aoös river and Pindos)	http://pindosnationalpark.gr/
4	Messolonghi Lagoon National Park	http://www.fdlmes.gr/
5	Kerkini Lake National Park	http://kerkini.gr/
6	Dadia-Lefkimi-Soufli Forest National Park	http://dadia-np.gr/
7	Evros Delta National Park	http://www.evros-delta.gr/gr/2012-08-02-08-44-48
8	Amvrakikos Wetlands national Park	http://www.amvrakikos.eu/
9	National Park of Eastern Macedonia and Thrace (Nestos Delta, Vistonida and Ismarida lake)	http://www.fd-nestosvistonis.gr/
10	Rodopi Mountain Range National Park	http://www.fdor.gr/index.php/el/
11	Axios Delta National Park	http://axiosdelta.gr/
12	Prespa National Park	http://www.junex.gr/index.php/el/ethniko-parko-prespon
13	Chelmos-Vouraikos National Park	http://www.fdchelmos.gr/el/
14	National Marine Park of Zakynthos	https://www.nmp-zak.org/
15	National Marine Park of Alonissos and Northern Sporades	http://alonissos-park.gr/
16	Protected Nature Area of Kalamas and Acheron Rivers	http://www.kalamas-acherontas.gr/perioxes-eythinis/ekvoles-stena-aheronta
17	Kotychi and Strofylia Wetlands National Park	http://www.strofylianationalpark.gr/index.php/el/
18	National Park of Tzoumerka, Peristeri & Arachthos Gorge	http://www.tzoumerka-park.gr/
19	Pamvotis Lake Protected Area	http://www.lakepamvotis.gr/
20	Olympus National Park	http://www.olympusfd.gr/
21	Protected Nature Area of Karpathos and Saria	http://www.fdkarpathos.gr/
22	Oiti National Park	http://oiti.gr/
23	Lake Karla-Mavrovouni-Kefalovryso-Velestino	http://www.fdkarlas.gr/
24	Mount Aenos National Park	http://www.foreasainou.gr/
25	Parnassos National Park	http://www.parnassosnp.gr/
26	Samaria National park	http://www.samaria.gr/en/home-2/

National Park of Koronia and Volvi Lakes
This website contains information on the management body, the ecosystem, maps, just two links, photographs etc. It is available in Greek and through Google translate button in English or other languages. The interactive tour button doesn't work.

Summer school is available, volunteer application, library catalogue and, as most of these websites, it has news and press releases, contact form etc.

Northern Pindos National Park (of Vikos gorge-Aoös river and Pindos)
The most recently created/reconstructed website with modern design, easy to navigate. Rich content available in other languages, in English and German. It contains information on the management body, the ecosystem, tourist and cultural information, news, actions, contact form, visitors/staff feedback form. The forum has no content but the Facebook button and YouTube channel are available. It is regularly updated.

Messolonghi Lagoon National Park
This site contains information of the management body and the ecosystem, up-to-date press on actions etc., links to various websites, maps, and information on ecotourism in English. Rich content, regularly updated, but its design is outdated.

Kerkini Lake National Park
Information on the management body, the national park, tourist information, links. The website is available in English and Bulgarian. It is not regularly updated. There is a blog, but no posts are published. Many photographs, no videos, but a YouTube channel is available, as well as a Facebook button.

Dadia-Lefkimi-Soufli Forest National Park
Information on the management body, contact form, translated in English, information on the national park, the ecosystem, cultural information, information on tickets, fire prediction map are the main characteristics of the Dadia-Lefkimi-Soufli Forest National Park's website.

Evros Delta National Park
Information on the management body, legal framework, ecosystem, for tourists and guests, news-announcements, information on environmental education actions, environmental monitoring, volunteering information, newsletter, poll are the main characteristics of this website. It has an English translation.

Amvrakikos Wetlands national Park
The website contains information on the management body and ecosystem, news, actions, photographs, contact form. It is not updated regularly and the English version is a just pdf file.

National Park of Eastern Macedonia and Thrace (Nestos Delta, Vistonida and Ismarida lake)
Information on the management body and the ecosystem, news, announcements, contact form, useful links, machine translation by Google, ecotourism map, newsletter, library with various documents, a presentation for children and some videos as well as a facebook button are the main elements of the website.

Rodopi Mountain Range National Park
The website contains information for the management body and the ecosystem, historical information, actions, new-announcements, contact form, tourist

information, search, English translation, audiovisual material, maps, meteorological data and it is regularly updated.

Axios Delta National Park
Modern, rich updated content, information on the management body, the ecosystem, tourist information, actions, newsletter, social media, search, English and German translations, contact form, photos and videos are the main characteristics of this website.

Prespa National Park
Information on the ecosystem, actions, new, contact form, links, information for visitors and tourists, android application with walking trails.

Chelmos-Vouraikos National Park
The website has information on the management body, the ecosystem, actions, tourist information, news, links, contact form, newsletter and its forum is under maintenance.

National Marine Park of Zakynthos
Information of the management body and the ecosystem, for visitors and tourists, obsolete security certificate, multimedia, newsletter, information on programs and actions are data that the website mainly contains.

National Marine Park of Alonissos and Northern Sporades
Information on the park and the ecosystem, historical information, volunteering, audiovisual material and digitally published documents available for download are the main content of the website. It is available only in Greek.

Protected Nature Area of Kalamas and Acheron RiversInformation on the management body and the ecosystem, photographs, tourist information, FAQ, news, press releases, announcements, information on environmental education, regularly updated blog.

Kotychi and Strofylia Wetlands National Park
The website is user friendly and usable. It has information on the management body, the ecosystem, for visitors and tourists, application for volunteers, downloads, multimedia, maps, educational material, actions, news and a contact form.

National Park of Tzoumerka, Peristeri & Arachthos Gorge
Plenty of information on the management body and the ecosystem, tourist guide, news-press releases, maps, contact form, informative material, photographs, English translation and a questionnaire on sustainable tourism are the main characteristics of this website.

Pamvotis Lake Protected Area
Information on the management body, the ecosystem, the museum, tourist information, actions, volunteering, news, contact, photographs and videos.

Olympus National Park
This website is under construction. The existing one was assessed as is. It contains information on the management body, the ecosystem, rich content for visitor, photographs, maps, links and a contact form. It has an English version.

Protected Area of Karpathos and Saria
Information on the management body, the ecosystem, news, press releases, contact form, links, English translation, photographs and maps are the main characteristics of this website.

Oiti National Park
Rich updated content, information on the management body, the ecosystem, guide for tourists, library with informative material and studies available for download, as well as photographs, news, contact form.

Lake Karla-Mavrovouni-Kefalovryso-Velestino
The website has an outdated design. It contains information of the management body and the ecosystem, maps, volunteering application, tourist information, announcements, contact form, downloads, machine translation of the website in various languages by Microsoft translator, GIS navigator application and its main advantage is that it is regularly updated.

Mount Aenos National Park
Information on the management body and ecosystem, for tourists and visitors, English version, newsletter, maps, contact form, video, audiovisual material, virtual tour, educational game and volunteer application are the main characteristics of this website.

Parnassos National Park
This website is easy to navigate and it is updated regularly. It contains information on the management body and ecosystem, actions, maps, library, contact form, English version, tourist information on Parnassos, walking trails, etc.

Samaria National park
This website has nice design that is recently constructed and is regularly updated. It contains information on the management body and the ecosystem, news, actions, English version, maps, links, photographs and videos, etc.

4 Analysis

All website contained the general information about the management body such as information about its structure, objectives, financial statements etc. Additionally, all of them contained information about the ecosystem of the PA and gave contact information. It is rather strange that 1 of the websites did not give any photographs of the area and 5 of them had not published any press releases. The latter is quite strange if one considers that the main purpose of a website is to inform its audience.

22 out of 26 had a news section and a similar percentage gave touristic information to its users.

About half of them had boring websites, some of which did not provide any photos, maps, links or downloads. More specifically, 15 out of the 26 provided maps of the area, 17 related links, 11 downloads (but some were broken links). Only 61% of the websites provided information about their actions and only 30% of all websites gave the opportunity to users to voluntarily participate in those actions.

What was really strange and make website unusable were than only half of them gave the search options for their users. Finally, only a small percentage of them had newsletter or social media. A synopsis of what each website contained is provided in Table 2.

5 Discussion of Results

In terms of content, all the national park websites were similar. They contain information on the management body, the ecosystem, some legislation, information for the tourists and the visitors, maps, contact form, as well as news (in the form of press releases, actions that may not shown in their respective calendars). 19 of the 26 websites were available in English and 7 of them only available in Greek, while four of them were translated to languages other than English (some of them using machine translation tools like Google or Microsoft translator). Availability of a website at least in English (if not in more languages) gives access to foreign visitors which can improve the global image of the national park and impact its popularity. Since tourism is one of the major financial sectors in Greece, online visibility may contribute to the development of eco-tourism and financially support local economy. About 35% of the websites offered subscription to their newsletter and social media buttons according to current trends (Facebook, YouTube, Google + etc.)

Those constructed more recently had better design, more appealing, modern and user friendly in contrast to the older ones that were found to be difficult to navigate, lacked content and updates. Many of the websites offered recommendations of walking trails, but that of Prespa National Park had an android application (Prespa Juniper on Google Play) with walking trails available for download to the visitor’s Smartphone providing easy access.

The management body of the Protected Nature Area of Kalamas and Acheron Rivers has a nice blog which is regularly updated, and while some other websites seemed to have provision for a blog or forum, they were not functioning. There was usually informative and educational content available for download as pdf. Aenos National Park offered a game for children (word search puzzle, crossword, knowledge quiz), simple without impressive game graphics. Also, the same website offered a virtual tour, but it was just another form of presenting photographs. Dadia-Lefkimi-Soufli National Park provide a form for visitors or staff to enter birdwatching observations.

Table 2. Synopsis of the content of the websites

Website content	National Park of Schinias-Marathon	National Park of Koronia and Volvi Lakes	Northern Pindos National Park (of Vikos gorge-Aoös river and Pindos)	Messolonghi Lagoon National Park	Kerkini Lake National Park	Dadia-Lefkimi-Soufli Forest National Park	Evros Delta National Park	Amvrakikos Wetlands national Park	National Park of Eastern Macedonia and Thrace (Nestos Delta, Vistonida and Ismarida lake)	Rodopi Mountain Range National Park	Axios Delta National Park	Prespa National Park	Chelmos-Vouraikos National Park
Information on the management body (structure, objectives, financial statements)	✓✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Historical information	✓				✓	✓				✓			
Information on the ecosystem	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Maps	✓		✓	✓			✓		✓	✓			
Volunteering													
Voluntary participation in actions	✓	✓	✓				✓						
Press releases	✓	✓	✓	✓	✓			✓		✓	✓	✓	✓

(continued)

Table 2. (continued)

Website content	National Park of Schinias-Marathon	National Park of Koronia and Volvi Lakes	Northern Pindos National Park (of Vikos gorge-Aoös river and Pindos)	Messolonghi Lagoon National Park	Kerkini Lake National Park	Dadia-Lefkimi-Soufli Forest National Park	Evros Delta National Park	Amvrakikos Wetlands national Park	National Park of Eastern Macedonia and Thrace (Nestos Delta, Vistonida and Ismarida lake)	Rodopi Mountain Range National Park	Axios Delta National Park	Prespa National Park	Chelmos-Vouraikos National Park
Actions	✓		✓				✓	✓		✓	✓	✓	✓
Contact	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Downloads	✓	✓					✓		✓			✓	✓
Links	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓
News	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓
Photographs	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Multimedia									✓	✓	✓		✓
Library catalogue		✓								✓			
Digital library													
Digital magazine		✓											
Interactive tour													
English	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	
Other languages					✓				✓		✓		

(continued)

Table 2. (continued)

Website content	National Park of Schinias-Marathon	National Park of Koronia and Volvi Lakes	Northern Pindos National Park (of Vikos gorge-Aoös river and Pindos)	Messolonghi Lagoon National Park	Kerkini Lake National Park	Dadia-Lefkimi-Soufli Forest National Park	Evros Delta National Park	Amvrakikos Wetlands national Park	National Park of Eastern Macedonia and Thrace (Nestos Delta, Vistonida and Ismarida lake)	Rodopi Mountain Range National Park	Axios Delta National Park	Prespa National Park	Chelmos-Vouraikos National Park
Tourist information		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Search		✓	✓				✓	✓		✓	✓		
Responsive	✓	✓	✓	✓		✓					✓	✓	
Newsletter							✓		✓		✓		✓
Social media									✓		✓		✓

Website content	National Marine Park of Zakynthos	National Marine Park of Alonissos and Northern Sporades	Protected Nature Area of Kalamas and Acheron Rivers	Kotychi and Strofylia Wetlands National Park	National Park of Tzoumerka, Peristeri & Arachthos Gorge	Pamvotis Lake Protected Area	Olympus National Park	Protected Area of Karpathos and Saria	Oiti National Park	Lake Karla-Mavrovouni-Kefalovryso-Velestino	Mount Aenos National Park	Parnassos National Park	Samaria National park
Information on the management body (structure, objectives, financial statements)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Historical information		✓								✓			

(continued)

Table 2. (continued)

Website content	National Marine Park of Zakynthos	National Marine Park of Alonissos and Northern Sporades	Protected Nature Area of Kalamas and Acheron Rivers	Kotychi and Strofylia Wetlands National Park	National Park of Tzoumerka, Peristeri & Arachthos Gorge	Pamvotis Lake Protected Area	Olympus National Park	Protected Area of Karpathos and Saria	Oiti National Park	Lake Karla-Mavrovouni-Kefalovryso-Velestino	Mount Aenos National Park	Parnassos National Park	Samaria National park
Information on the ecosystem	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Maps		✓		✓	✓		✓	✓	✓		✓	✓	✓
Volunteering		✓		✓									
Voluntary participation in actions	✓					✓				✓	✓		
Press releases	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓
Actions	✓		✓	✓			✓	✓	✓	✓			✓
Contact	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Downloads	✓								✓	✓	✓	✓	
Links	✓			✓		✓			✓	✓		✓	✓
News	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓
Photographs	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Multimedia	✓	✓	✓	✓		✓					✓		✓
Library catalogue													
Digital library													
Digital magazine													

(continued)

Table 2. (continued)

Website content	National Marine Park of Zakynthos	National Marine Park of Alonissos and Northern Sporades	Protected Nature Area of Kalamas and Acheron Rivers	Kotychi and Strofylia Wetlands National Park	National Park of Tzoumerka, Peristeri & Arachthos Gorge	Pamvotis Lake Protected Area	Olympus National Park	Protected Area of Karpathos and Saria	Oiti National Park	Lake Karla-Mavrovouni-Kefalovryso-Velestino	Mount Aenos National Park	Parnassos National Park	Samaria National park
Interactive tour											✓		
English				✓	✓		✓	✓	✓		✓	✓	✓
Other languages										✓			
Tourist information	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
Search	✓		✓			✓			✓	✓			✓
Responsive	✓	✓	✓	✓	✓				✓				✓
Newsletter	✓		✓								✓		
Social media			✓		✓	✓				✓	✓		✓

None of the websites, in spite of having plenty of information for tourists and visitors, offered services such as e-shop, e-tickets etc. During our assessment the website of Northern Pindos National Park (of Vikos gorge-Aoös River and Pindos) was reconstructed and the new more modern site ranked second. That of Olympus National Park is still under construction, so the existing version of this website was assessed.

The lower-ranking websites were not bad in terms of content, but they lacked in terms of design, navigability, ease of use, responsiveness and presented less overall attractiveness for the user.

6 Conclusion

Greece has 28 national parks, 26 of which own a website. The quality of a website plays an important role on perception the visitors or potential visitors acquire about the management body of the protected area. Therefore, the usability as well as the content of a National Park's website configures the image of the management body of the protected area and may produce a virtual experience for visitors. Their quality varied considerably depending on how recently they had been constructed and how often they update their content. Generally, the image of the management bodies of the PAs were not bad as even the lower-ranking websites were good in terms of content and, therefore, promoted environmental public awareness.

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Chapter 31
Towards Smart Creative Tourism

Lino Trinchini and Thanasis Spyriadis

Abstract Creative tourism has recently emerged as an evolved, interactive and integrated form of cultural tourism. Active participation of tourists in creative and learning experiences characterizes the shift from traditional cultural tourism to creative tourism. Tourists are no longer mere consumers and spectators of tangible and intangible cultural attractions, but active co-producers and co-creators of their experiences. Tourist destinations have increasingly developed creative tourism strategies to enhance competitiveness and for urban regeneration. The growth of creative tourism can be associated with the diffusion and use of advanced Information and Communication Technologies (ICTs). While such dynamics have been largely addressed in literature, there is still little understanding of the impact of smart technology (e.g. internet of things) on cultural and creative tourism industries. Academic works, in particular, tend to focus on isolated smart technology applications for creative attractions and cultural heritage. In the light of recent smart tourism developments, this paper explores the current trends in creative tourism to find elements of convergence with smart tourism. In doing so, the paper focuses on the role of technology, the business context and the social dimension as key components of the emerging smart creative tourism phenomenon. The need for an all-encompassing approach to smart creative tourism development is finally suggested by proposing some potential lines of further research.

Keywords Smart tourism · Creative tourism · Cultural tourism · Smart technology · Creative business ecosystem · Smart destinations

JEL Classification O3 L83

L. Trinchini (✉) · T. Spyriadis
Manchester Metropolitan University, Manchester, UK
e-mail: lino.trinchini@stu.mmu.ac.uk

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1 Introduction

Many destinations rely on cultural tourism strategies to foster sustainable local development, socio-economic development and regeneration (Kennell 2012; Smith 2015). Cultural attractions have been increasingly used to attract visitors and stimulate consumption by tourists and residents (Richards 2001). Hence, the use of cultural tourism as a marketing tool by organisations, intermediaries and destinations. Given the profound relationship between culture and tourism, any change occurring in one domain affect the other (Richards 2014b). The idea that tourism embodies cultural experiences (MacCannell 2002) or the total equivalence between tourism and culture (Urry 1990) is deeply rooted in the traditional combination of the meaning of culture and tourism to define cultural tourism (Mousavi et al. 2016). Hence, the problems of defining such complex and dynamic phenomenon in terms of a single all-encompassing concept.

Culture and tourism have experienced radical transformations driven by remarkable technological changes leading to a different interpretation of cultural tourism. Whereas current cultural tourism experiences are highly characterised by creativity and the active participation of tourists (Richards and Marques 2012), the ongoing evolution towards smart tourism embodies the 'progression from traditional tourism and more recently e-tourism' on the ground of recent technological innovations (Gretzel et al. 2015a, p. 180). Even if such common evolutionary trajectories have been broadly addressed by authors (Epstein and Vergani 2006; Jara et al. 2015), the entwined relationship between smart tourism and creative tourism still presents research gaps to be filled through a holistic approach rather than focusing on fragmented and heterogeneous applications of ICTs and innovations (Leue et al. 2015). This paper examines the main aspects of the creative tourism phenomenon from the emerging smart tourism perspective. The paper explores the role of technology, the business context and the social dimensions of creative tourism, with attention to their implications for an emerging notion of smart creative tourism. In the light of what is suggested and discussed in the literature, potential future directions of research are proposed.

2 From Cultural Tourism to Creative Tourism

Culture has been assumed to be 'a major determinant of the growth of tourism and leisure consumption' (Richards 2001, p. 8). Alongside historical sites, monuments and museums, new forms of cultural attractions have emerged over time, as a result of the changes in what is understood and accepted as culture. Sport, gastronomy, musical events, local festivals and fairs, recreation parks, art galleries and performing arts are some of the most popular cultural components (Richards 2001) reflecting the shift, or better the integration, from/of the so-called "high culture" to/and "mass culture" (Urry 1990). Such entwined combination of tangible and intangible cultural attractions has several challenging implications for tourists, organisations and destinations. First, the growth in the number of cultural attractions has created heterogeneous niches of tourism consumption requiring additional efforts to market and manage them at destination level (Russo and Van Der Borg 2002). Second, heritage and historical sites are no longer unique and distinctive cultural attractors of tourist destinations (Richards 2001), whereby the need to reposition themselves by diversifying their cultural offer and compete globally (Richards 2014a). Third, the identification of cultural tourists for strategic and marketing purposes has become difficult due to the broad, fragmented and diversified demand and offer of cultural products. Whereas cultural tourists are still not easy to distinguish from other types of tourists on the ground of their motivations and behaviour (Mousavi et al. 2016), cultural production has expanded with different competing cultural products to meet the diverse and changing patterns of cultural consumption among tourists and local residents (Richards 2014a). Hence, the prominence of consumption-led processes and products of cultural tourism determined by socio-economic drivers that are common to culture and tourism. Richards (2011) identifies them in terms of increased number of holidays and mobility; higher level of education, income and economic status; easier access to information and booking through the web and social media. This marks the shift from the mass product-driven cultural tourism to consumption-based experiences, and lately towards the production-consumption convergence (Gilmore and Pine 2002; Liu and Lin 2011; Richards 2014b). Undoubtedly, the ever-changing cultural tourism domain is characterised by the blurring boundaries between tangible and intangible cultural attractions (Ruggles and Silverman 2009) as well as their production and consumption (Pappalepore et al. 2014).

Creative Tourism

With tourists increasingly involved in the production and consumption of cultural attractions, creative tourism emerged as a "new" integrated form, or extension, of cultural tourism (Richards and Raymond 2000). Creative tourists are active producers of their experiences (Campos et al. 2018), rather than passive onlookers visiting places, sites or museums (Richards and Wilson 2006). 'Tourists do not just consume culture, they can also make culture' (Richards 2014b) and places (Evans 2015) by living and dwelling in local communities, while tourist providers tend to empower and facilitate creative tourism experiences at the destination. At urban, rural and regional level, tourism is used to link creative experiences to the destination in terms of innovation, sustainability and regeneration of places (Della Lucia et al. 2017). Most of creative tourism initiatives, however, have been developed within the urban context (D'Auria 2009; Richards 2014a), with strategies based on different types of experiences, from festivals and fashion (Weller 2013) to performing and culinary arts (Vanolo 2015). This turn to creativity in cultural tourism reflects the underlying social, technological and economic evolutionary processes in the cultural and tourism realm. The current cultural system, defined by Sacco et al. (2012) as the Culture 3.0 phase, is highly characterized by the active participation of individuals in the co-creation of experiences through an easy access to production technology. In contrast to the Culture 1.0 and Culture 2.0 phases, respectively denoted by patronage/'high culture' and mass consumption-driven market, Culture 3.0 relies on technical innovations, such as the internet and social media, networked economic actors and socio-economic value co-creation (Sacco et al. 2012). As a complementary sector, urban cultural tourism follows the same path of the Culture 3.0 paradigm (Richards 2015). From the consumption of elite tourism epitomised in the Grand Tour (Culture 1.0), cultural tourism progressed through the expansion of the mass tourism market (Culture 2.0) to tourist experiences co-created in fragmented, flexible and distributed value networks enabled by ICTs (Culture 3.0). The emphasis on active participation entails a systemic approach to culture and creativity (Sacco et al. 2012). Richards and Marques (2012, p. 8), in particular, argue that 'creative tourism can be viewed as a form of networked tourism, which depends on the ability of producers and consumers to relate to each other and to generate value from their encounters'. A similar systemic view of tourism can be found in the emerging conceptualization of smart tourism and smart tourism destinations. Gretzel et al. (2015a) define smart tourism in terms of smart destinations, smart business ecosystem and smart experience components as well as data collection, exchange and processing layers across them. The integration of smart technologies into consumers and business processes enables the active role of tourists in co-creating their experiences and empowers destination management by interconnecting public and private organisations one another and with tourists. As special case of smart cities, smart tourism destinations encompass both the smart business ecosystem and the smart experience (Buhalis and Amaranggana 2014), which are characterised by value co-creation (Boes et al. 2016). This emerging phenomenon may have great influence on technological, business and social aspects of cultural and creative tourism.

3 The Role of Technology

Creative tourism is consistently linked to technology developments and innovation. Scholars (Feng and Xu 2009; Richards 2014b) have recognized the role of pre-internet technologies (e.g., radio and television) in reproducing cultural content for its passive consumption and internet-based technologies increasing access and production of culture through interactive communications. The web, mobile technologies and social media, in particular, have strengthened creativity and tourism relationship. Creative tourists use these "new" technologies to enhance their knowledge and cultural tastes by gathering and exchanging information about cultural attractions and local way of life. This may occur before travelling to the destination, with impact on visiting motivations, and on-site, with impact on itineraries and experiences (Jovicic 2016). Active participation in cultural production and interaction with the local culture through digital media are usual practice of travelling. Smartphones, for instance, help to create personalized itineraries in cities within which the users are invited to engage with the narrative and traditions of the place, including serendipitous encountering with locals (Epstein and Vergani 2006). Thus, creativity is triggered by technology, but it is the creative process that influence innovation and its typical output (technology), rather than the opposite (O'Sullivan and Dooley 2008). In this sense, the active use of smart technology in tourism expands cultural production and consumption frontiers. Within the smart tourism context, such technology provide users (tourists and residents) and cultural organizations with easier access to different types of cultural content and information, active engagement, 'better decision support, mobility, and, ultimately, more enjoyable tourism experiences' (Gretzel et al. 2015a, b, p. 181; Chianese et al. 2015). Augmented Reality (AR), Virtual Reality (VR), artificial intelligence, sensors, internet of things and location-based systems are some of the most common smart technologies adopted by creative users, organisations and destinations (Chianese and Piccialli 2017). Tourists and locals, in cities and rural areas, can find new places, learn new things and share them by engaging in location-based geocaching activities (Ihamäki 2012) or they may create knowledge when visiting a museum to enrich its collection/exhibit (Korzun et al. 2017). At the same time, destinations can use smart technology to enhance on-site experiences and empower the co-creation of value by providing real-time information and/or interaction with people and cultural attractions (Garau 2014). Similarly, cultural attractions (e.g. art galleries and museums) use AR/VR (Tom Dieck et al. 2016) and wearable devices (Leue et al. 2015) bridging the gap between digital content and real objects to encourage learning experiences. While users aim to enhance their knowledge through learning activities and active participation, cultural attractions and destinations focus on the integration of advanced ICTs in respect of governance, tourism development, efficiency, value co-creation, data mining, demand forecasting and competitiveness (Angelidou et al. 2017, Cooke and Lazzeretti 2008). Positive contributions of smart systems, however, depend on a holistic approach to technology, rather than isolated technology applications at a destination or attraction level. Big data management, for instance, should be carried out systemically to promote and preserve cultural heritage (Morelli and Spagnoli 2017). The benefits of smart technology have been recognised within the cultural/creative context of smart cities, even if such environment is still characterised by fragmented and heterogeneous technological developments (Angelidou et al. 2017). The approach to ICTs, in smart tourism destinations, is essentially based on the view of technology as an infrastructure connected with other infrastructures (physical, social and business) to take advantage of the collective intelligence of digital business ecosystems (Buhalis and Amaranggana 2014). The view of technology as instrumental is common to smart tourism and creative tourism, which recognises the potential of advanced ICTs in 'transforming the production, interpretation, exchange, marketing and consumption of cultural services' (Gretzel et al. 2015a; Sigala 2005, p. 181). Also, the ongoing shift towards creative tourism in cities is consistent with the conceptual tenets of smart tourism (Table 1).

Current technological innovations, therefore, can be seen in respect of their capability to support a wide range of seamless creative experiences, regardless of individual and specific technology being employed by tourists, with implications at

Table 1 Smart tourism and creative tourism (Adapted from Gretzel et al. 2015a, p. 182)

	Smart tourism	Creative tourism	Authors
Sphere	Bridging digital & physical	Bridging physical (tangible) & digital (intangible) attractions	Ihamäki (2012), Garau (2014)
Core technology	Sensors & smartphones	Sensors & smartphones, along with other smart ICTs (e.g. AR/VR)	Epstein and Vergani (2006), Leue et al. (2015)
Travel phase	During trip	On-site experiences	Jara et al. (2015), Chianese and Piccialli (2017)
Lifeblood	Big data	Capturing, storing & make sense of data crucial to creative experiences	Bruce et al. (2017), Morelli and Spagnoli (2017)
Paradigm	Technology-mediated co-creation	Tourists, locals & organisations use of ICTs to co-create experiences	Majdoub (2014), Korzun et al. (2017), Lin et al. (2017)
Structure	Ecosystem	Networked & systemic view of creative tourism	Turner et al. (2014), Jara et al. (2015)
Exchange	Public-private-consumer collaboration	Public-private-users participation/collaboration	Russo and Van Der Borg (2002), Marques and Borba (2017)

business and social level. The multidimensional approach to technology sustaining the foundation of smart tourism may also apply to the cultural/creative tourism realm.

4 The Business Context

The disruptive technological forces of ICTs are imposing a structural transformation of the creative tourism business context. Sacco et al. (2012, p. 7) refers to the 'explosion of the demand possibilities, but also, and mainly, an expansion of the production ones'. Smart ICTs have facilitated the transformation of consumers into producers of cultural content and services, in a way that makes their role interchangeable (Pappalepore et al. 2014). In smart destinations, all actors involved in the co-creation of creative experiences can be recognised as producer, user or intermediary (Gretzel et al. 2015b), according to the level of integration of smartness within the urban context (Boes et al. 2016). This is particularly relevant in smart cities adopting creative tourism strategies to differentiate and gain cultural competitive advantage (Graziano 2014), with impact on authorship, intellectual property, business models and value chains (Hartley 2017). As a result of the expansion of cultural boundaries and creative tourism products (Richards and Wilson 2006), the number of intermediaries has grown and new forms of entrepreneurship have emerged (Richards 2014b). With residents and tourists act as co-producers and co-creators of their experiences by accessing, changing and exchanging tangible (e.g. tools and artefacts) and intangible (e.g. information and skills) resources (Richards 2007), conventional value chains and business models are no longer effective to survive and compete within the smart tourism environment (Gretzel et al. 2015a). The growth of intangible attractions production and consumption in connection with lower copyright restrictions for digital cultural content is challenging value propositions, revenue streams, key resources and cost structure associated with intellectual property gains (Lessig 2016). With creative experiences co-created by all actors involved (Richards 2015), the embedded value should be recognised in terms of the consumption of creative tourism experiences (Vargo and Lusch 2004; Majdoub 2014). According to Service Dominant Logic (SDL) view of value co-creation, firms have to consider the use value resulting from systemic co-creation processes, rather than the transactional value added in their propositions (Vargo et al. 2008). In smart tourism destination, value creation is collectively determined by collaborative private-public-consumers actors exchanging and integrating resources (Boes et al. 2016). Further, Lusch et al. (2010) recognise knowledge, relationships and information as the glue of value networks characterised by multiple supply chains of loosely-coupled actors co-producing and exchanging service offering and co-creating value. This is consistent with the notion of smart tourism ecosystem as value network (Gretzel et al. 2015b; Boes et al. 2016). Yet, creative tourism value networks have not been widely recognised. Some authors (Richards 2015, p. 28; Marques and Borba 2017) have recognised the shift towards a systemic co-creation of value between interconnected stakeholders in 'more distributed value network(s)'. Others (e.g. Graziano 2014) still refers to hierarchical value chains and the added value of culture and creativity in tourism. In line with a systemic view of smart creative business contexts (Barile et al. 2012; Jung and Tom Dieck 2017), the impact of smart tourism on creative tourism needs to be fully explored (Table 2). Hsu et al. (2016) note that operating in a smart tourism ecosystem requires innovative business models centred on the integration of external resources and value co-creation. Alongside human and social capital investments, smart tourism scholars (Buhalis and Amaranggana 2014; Gretzel et al. 2015a; Boes et al. 2016) advocate open innovation approaches as essential to smart tourism destinations competitiveness and socio-economic sustainability. A similar attention to open innovation and open business models as viable approach to current market dynamics can also be found in the creative tourism domain (São Simão et al. 2017).

5 The Social Dimension

People and institutions (i.e. shared norms, rules and values), combined with hard smartness components (technology), are crucial smartness components of sustainable smart destinations (Boes et al. 2016). Human capital and social capital, in

Table 2 Cultural, creative and smart creative tourism (Adapted from OECD 2014:53)

	Cultural tourism	Creative tourism	Smart creative tourism	Authors
Externalities	Conservation	Innovation	Open innovation	São Simão et al. (2017), Schiuma and Lerro (2017)
Structure	Products	Platform & content	Smart services ecosystem	Barile et al. (2012), Gretzel et al. (2015b)
Process	Interpretation	Co-creation		Jung and Tom Dieck (2017), Marques and Borba (2017)
Value creation	Value chains	Value networks		OECD (2014), Richards (2015)
Value focus	Upstream	Downstream	Upstream & downstream	Brandellero and Kloosterman (2010), Hartley (2017)
Funding	Public	Commercial	Public-private	Sacco et al. (2012), Della Lucia et al. (2017)

particular, are determinants of innovation and competitiveness of smart places. Urban innovation sustainability depends on smart cities capability to nurture the link between knowledge and skills (human capital) and the networks of people connected by institutions (social capital) (Nam and Pardo 2011). Individual and collective knowledge enhancement in smart cities support collaboration, cooperation and co-creation between all stakeholders to improve services and residents' quality of life. The ability to attract knowledgeable and creative people, therefore, may determine the success of smart cities and smart tourism destinations. As source of attractiveness, the growth and diffusion of creative hubs and quarters has played a central role in the regeneration and sustainable socio-economic development of urban areas (Cooke and Lazzeretti 2008; Evans 2015; Frey 2009), with greater societal impact on smart tourism destinations. However, the growth of creative clusters within cities have raised several issues concerning local sustainable development and benefits for local communities. Zukin (2009) draws attention to the consequences of creative districts on authenticity of cities as distinctive attribute threatened by an increasing gentrification and commodification of places. Likewise, Richards and Wilson (2006) address the serial reproduction of cultural attractions and the need for locally-based distinctive creative strategies developed tourist experiences to avoid their assimilation in the global cultural system production. Indeed, by placing local communities at the core of creative tourism strategies, destinations may reduce the tension between commodified tourist products and cultural heritage-based sustainability (Marques and Borba 2017). This appears to be in contrast to the idea of a distinct "class" of creative people, as a "new form" of mobile and tech-savvy consumers, to be attracted by cities willing to enhance competitiveness by leveraging external creative capital, resulting from the combination of human and social capital (Gretzel and Jamal 2009; Florida 2014).

Actually, the stress on external creativity can arguably be problematic for smart tourism destinations, which focus on the co-creation of value for the benefit of both tourists and residents (Lopez de Avila 2015). Creative tourism experiences in smart tourism destinations are quite different from other forms of cultural tourism experiences (Epstein and Vergani 2006), because they take place in a context facilitating different levels of interactions with locals and heritage (Garau 2014; Pappalepore et al. 2014). Considering the co-creation of value as central tenet of smart destinations (Boes et al. 2016), both residents and tourists are equally recognized as users and beneficiary of smart services provided by the tourist destination (Marques and Borba 2017). Accordingly, creative strategies devised by smart destinations may adopt the emerging "usership" approach, which refers to a form of cultural production based on the creation of shared value within a community of users (Wright 2013). According to this view, cultural attractions are agents of social cohesion and public engagement within an interconnected community. Even if it is still limited to art galleries and museums (Villegas 2016), "usership" could convey actual benefits to local communities in a way that is conceptually and practically in line with the notion of smart tourism destination. Therefore, the mere accumulation of knowledge and social capital in smart urban contexts cannot implicitly ensure sustainable social innovations. Given the challenging and complex nature of creative tourism experiences (Richards 2014a), the integration of advanced ICTs in the cultural landscape of smart destinations requires suitable systems of governance, policies and strategies combining top-down and bottom-up approaches (Sacco et al. 2012; Angelidou et al. 2017; Marques and Borba 2017).

6 The Convergence of Creative Tourism and Smart Tourism

The growing adoption of smart technology to engage tourists in creative experiences qualifies creative tourism in a smart tourism environment and the relationship between creative industries and tourism. Provided that 'smart tourism are amalgamations of products and services often intertwined with the products and services provided by the city' (Boes et al. 2016, p. 120), it is not uncommon that destinations, and cultural attractions, place on-site creative smart tourism experiences at the core of their strategies (Leue et al. 2015). The integration of smart ICTs into destinations has larger implications than simply enhancing creative tourism experiences, with respect to better quality of life of all stakeholders. Nevertheless, creative tourism strategies are often developed by smart cultural destinations to rejuvenate urban areas or enhance their competitiveness (Della Lucia et al. 2017). Integrating smartness into creative tourism destinations entails the translation of the relationship between technology, people and urban governance into enriched experiences through an efficient use of big data (Garau 2014; Morelli and Spagnoli 2017). This is consistent with the notion of smart tourism (Gretzel et al. 2015a).

In particular, creative tourism experiences in smart destinations actualise the key tenet of co-creation as well as the attention to locals and tourists alike. This is evident, for instance, in "playable cities" (http://www.playablecity.com) in which local communities, citizens and tourists are interconnected by smart ICTs and involved in creative projects co-creation (Marques and Borba 2017). As for smart experience (Neuhofer et al. 2015), active participation is at the core of smart creative experiences (Jung and Tom Dieck 2017) and a vital element for the participatory development of smart creative destinations (Richards 2015; Lin et al. 2017). With the technology-mediated creative tourism experience resembling smart experience, the system of relationships between all creative actors involved should be recognised as smart business ecosystem, the third component of smart tourism (Gretzel 2015a). Several converging elements tend to support such consistent alignment. First, the integration of smart ICTs in creative tourism requires an ecosystemic approach (Sacco et al. 2012). Second, the active participation of tourists and residents has been expanded by advanced technologies empowering the co-creation of their experience (Richards 2015). Third, an open innovation environment fosters creative tourism experience co-creation, which implies redefining the traditional business model approach based on internal rather than external resources (São Simão et al. 2017). Finally, in the light of the pervasiveness of culture and creativity, big data play a key role in digital creative ecosystems in enabling open innovation and the co-creation of smart creative tourism experiences (Morelli and Spagnoli 2017). Thus, smart creative tourism can be seen as 'a form of networked tourism, which depends on the ability of producers and consumers to relate to each other and to generate value from their encounters' (Richards and Marques 2012, p. 9). With respect to the co-creation of value within creative service ecosystems, SDL theoretical view could also be adopted in smart creative tourism management approaches (Jung and Tom Dieck 2017). The phenomenological nature of creative experiences, knowledge and skills as the most important resource for creativity, the blurring boundaries between producers and consumers and the crucial role of creative tourists/users are all congruent with the SDL view of value co-creation uniquely and experiential determined by the beneficiary through use (Vargo and Lusch 2004). Hence, the focus on human and social capital, usership models (Villegas 2016), value networks (Richards 2015) and open innovation (São Simão et al. 2017) by smart creative destinations to improve competitiveness and sustainability. Social innovation developments of smart creative destinations, in terms of the positive impact of creative practices on local communities, depends on the capability of the ecosystem in integrating all smartness components for the benefit of all actors involved in the co-creation of value (Bencardino and Greco 2014). With this in mind, creative strategies within smart tourism destinations should be developed from endogenous, rather than exogenous human and social capital (Richards and Wilson 2006). This corresponds to the endogenous view of value co-creation by SDL (Vargo et al. 2008) and in contrast to the "creative class" logic stressing the importance of external capital (Florida 2014).

7 Conclusion and Future Research Directions

This paper tried to examine the relationship between creative tourism and smart tourism, with attention to some of the main converging components. In doing do, it has addressed the evolution of cultural tourism into creative tourism in the light of emerging smart tourism dynamics. The paper identifies several points of convergence of creative tourism and smart tourism across the social, economic and technological foundational dimensions of smart tourism. The assumption that current creative tourism evolutions should be understood through the smart tourism lens might be seen as one of the major limitations of this paper suggesting additional complementary strand of research from the creative tourism domain perspective. Creative tourism and smart tourism interplay, for instance, could be explored and/or questioned in terms of urban, regional and rural strategies (Andriotis 2006), authenticity and cultural socio-economic development (Macleod 2006), creative cities networks (Richards 2014a) or private-public structural funding (Sacco et al. 2012). Nevertheless, the argument about the emerging notion of smart creative tourism is supported by several interrelated factors. Creative tourism is moving towards smart tourism in terms of the impact of smart technologies on cultural/creative socio-economic domain, the active participation of tourists and locals in the co-creation of their experiences, the endogenous value co-creation view involving all stakeholders, the emerging approach to creative ecosystems as value networks and the important role of big data. Hence, the need to address the challenges and issues emerging from such emerging cultural/creative landscape. Considering that studies in this particular field of smart tourism are very limited, future research directions might include: suitability of SDL theoretical underpinnings; the impact of smart technology on creative initiatives for sustainability and regeneration; open innovation and business models; digital divide and access to technology-mediated creative experiences; data/information and privacy issues; smart creative ecosystems governance and private-public collaboration; creative approaches to resilience at firms and destinations level. These areas of research are not exhaustive. A broad and comprehensive investigation of theoretical and practical issues concerning smart creative tourism potential and limitations would support the notion of such complex and dynamic phenomenon.

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Part IV
Tourism Management and Structure

Chapter 32
Central Government Tourism Policy and the Development of Sports Tourism in Mass Tourism Areas: The Case of Crete

Leonidas Gaitanakis, Ourania Vrondou and Stella Leivadi

Abstract The dynamics of tourism in the global economy define a series of realigning with social and political implications. Changing trends and demand in tourism are proof that this is a "heavy industry" for development at national and regional level especially at traditional destinations. The development of tourism benefits from an effective policy scheme. The development of the tourism product in Greece during the last two decades was heavily based on the model of mass tourism. The product diversification pursued through special and alternative forms of tourism needs a coherent developmental policy in order to gain a competitive advantage in the international tourism clientele. The aim of the research is the examination of the reactions expressed within the central government structure regarding a potential sport tourism development on the traditional tourism destination of Crete as part of a rejuvenation strategy. The analysis produced valuable insight into the role of government in policy making for the development of sports tourism. The study extends to the examination of related stakeholders interaction with the central tourism making mechanisms proving that the process of sport tourism development is a challenging process.

Keywords Sports tourism · Tourism development · Public tourism policy

JEL Classification Z32

L. Gaitanakis (✉) · O. Vrondou
Department of Sports Management, University of the Peloponnese, Sparta, Greece
e-mail: gaitanakisleon@gmail.com

S. Leivadi
Business School, Sports Management Program, American College of Greece, Athens, Greece

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1 Introduction

The global acceptance of the phenomenon of tourism as a dynamic market which has the power to influence, shape and define megatrends and at the same time to shape a policy of sustainable development of the tourist product, demonstrates the important role that tourism plays in the economy of any country. The social upheavals, the political, environmental and technological changes that occur every day on a global scale reveal the ability of tourism to adapt but also the dynamic for growth that this “phenomenon” has in order to open new markets and create new trends. Creating new products such as sports tourism to upgrade the tourism offer many traditional destinations are in need of an effective national tourism policy to guide the development at the early stages of formation as well as regulate the operation in long run.

2 Theoretical Considerations

The supporting role of tourism in the areas of competitiveness, innovation and development are of paramount importance for the efficiency of the state economy, through entrepreneurship, employment and finally, internal consumption. The upward trend of the tourism market is increasingly perceived and the economic sector in Greece showing growth with an average of 4.2% of GDP, 6.9% increase in employment and 21.7% in services sector to OECD countries in 2018. The question, then, is how these dynamic impacts from the emerging trends can shape the future of tourism and the need to move investment and economy further towards a sustainable development of tourism.

The economies of the countries increasing socio-political benefits but also boost their economy by the potential of tourism sector and the development of the global market, which proves how strong the mechanism of demand and promotion really is. This demand is based on a wide range of activities, distinct product and specific destinations. However, there is also the other side of the market with an emerging saturation tendency, a near end life cycle of the product with a unilateral growth through the massive model (Butler 1988; Glyptis 1982; Hall 1992b; Marsh 1983; Rhodes 1986; Wilks and Wright 1987; Jackson and Weed 2003). These impacts seems highly possible that are putting pressure on governments for new policies, embedded strategies, functions and mechanisms, but not through a unilateral planning by the state sector, as was the case in the past but including the private sector as well as all the ‘interested’ players in tourism. Many countries, seeing the other side of the tourism development, are targeting policymaking from sort to long term and the priorities of the new policy to be focusing on increasing competitiveness, sustainability, participation and diversification in order to address the seasonal demand along with an increase in quality and special offers. Governments, recognizing the “self-centered” image of the existing policy, are taking action to modify the new policy model to include both the periphery and local government focusing on promoting and the highlighting of the specific characteristics of local destinations through a specific plan to strengthen the economy (Glyptis 1991a:169; Henry 1993, 2001; Rhodes 1986; Jordan and Richardson 1987; Houlichan 1991, 1994, 1997; Bull and Weed 2004). Many countries are also looking to diversify their destination based on new opportunities and experiences by trying to focus on the natural and cultural characteristics of the region and by looking for opportunities for year-round demand as well as focusing on health and wellness tourism, sports tourism and business and congress tourism.

Vrondou (1999) reminds that Crete is one of the most successful destinations in the Mediterranean, combining a multitude of cultural, historical and natural characteristics. The tourism industry followed the traditional development model in the 1970s in most of the Mediterranean destinations, developing characteristics identical to other competitive destinations (Weed 1999a, 2000, 2003b; Jackson and Glyptis 1992). In the same decade, Crete does not differentiate its tourism model. The island follows the Mediterranean tourism model, which along with other Greek destinations are receiving a massive influx of tourists for specific months bringing enormous profits and growth without, however, a specific tourism long term developmental policy (Weed and Bull 2004; Glyptis 1992; Weed and Bull 1997a). The importance of tourism for the region of Crete is reported by Vrondou (1999) and the effects of seasonal fluctuations have been recognized by all tourism operators showing increased sensitivity to protect and grow the tourism product. Innovative forms, and more specifically the "active" form of sport tourism, are recognized as being appropriate to contribute to a new direction which focuses on quality, offering new products based on special local features (Standeven and DeKnop 1999; Weed 2000). "Active" sports tourism can be the focus of a new tourism policy in the region of Crete, as the most appropriate activity through the extension of the tourism season, sustainability, and seeking to depart from the classical and degrading mass model of "sun and sea".

3 Methodology

Since the current survey is being conducted around the views of public policy makers at central levelon specific issues, the qualitative method and the technique of the personal interview are considered the most appropriate to achieve the objectives of the study. In this context, the interviews were based on a semi-structured questionnaire and the gradual withdrawal of the interviewer was attempted, allowing subjects to narrate.

The study was conducted during the months of October 2016–January 2017. The sample consisted of tourism officials (N = 07), from the central administration and the local government, in the region of Crete. In the present study, a semi-structured interview protocol was used consisting of a set of predetermined questions, but with greater flexibility in factors such as the order of questions, modification of their content and differentiation in their final number (Iosifidis 2008).

The questions were organized in five groups. The first group aimed in gathering information on the current situation and strategy implementation, the contribution of the legislative framework to development as well as the actors that influence the development of sports tourism as well as policy making. The second focused on the adequacy and operation of sports and special infrastructure in the countryside and hotel facilities and whether they can contribute to development. The third focused on the adequacy of the local and natural infrastructure, cultural heritage and the environment and to the promotion as well as the growth of underdeveloped areas of Crete Island through sports tourism. The fourth concerned the organization of sport events and the ways of promoting these events, and finally, the fifth category concerned issues of cooperation between public and private sectors, transportation issues and the quality of public facilities. Those factors include policy development, adequacy of sports infrastructure, special rural infrastructures, the contribution of the natural environment i.e. natural and local unique characteristics, cultural and historical characteristics, quality of life, the development of sport tourism through the organization of sports events, the level of sport tourism promotion, the cooperation of all "actors" as well as the effects and economic benefits that the local community acquires through this development.

The analysis of qualitative data is based on data encoding, i.e. the systematic way to collapse extended information into smaller and more easily analyzed units, by creating categories and concepts that derive from the data (Kambitsis 2004). The coding process is an important part of the analysis (Miles and Huberman 1994), as identification units are linked to each other and data is organized into meaningful groups.

4 Results

The first category includes the responses of central and peripheral administration and local government officials on the policy for the development of sport tourism in the region of Crete. The central government authorities agree that there is no specific policy for the development of sport tourism, not only in Crete but also in Greece in general. They reported that there is a framework for the development of alternative forms of tourism, but not a coordinated policy. In particular, there is no specific policy for the development of sport tourism, even from the point of view of institutionalization, to ensure the development of sport tourism as a sector. However, it was also pointed out that only few years after the implementation of the 'Kallikrates law' in the local and regional administration, efforts are being made at the regional level of Crete for planning and promotion of sport tourism but remains questionable. This promotion of tourism is through exposure of alternative forms and possibilities offered in Crete without specific references. This is done in partnership with a private company.

The public administration officials when referred to the legislative framework, agreed unanimously that it does not help, it does not have any direction, with no framework for development in Crete which is one of the inhibitive factors not only for sport tourism but also for all other alternative forms of tourism. They also stated that the legislative framework does not exist in general and there is no distinction between sport tourism and the other alternative forms. However, there is a defined legal framework for development of health tourism, but there are no evidence still recorded in Crete.

The existing legislative gap creates problems to individuals who want to invest on this sector but it also creates operational problems. Apart from the lack of legislation, other issues, such as bureaucracy and taxation, have also been mentioned, which do not help the development of sport tourism and investment in general. At a policymaking level, they reported that there is a need to study and evaluate the models used by other Mediterranean countries which have progressed in the development of sport tourism and the diversification of tourism overall, especially Greece's competitors. Afterwards, Greece's tourism product needs to be defined and delimited. Public executives unanimously agree that the strategy should be based on core axes of sport events, sports infrastructure and special rural infrastructures. They also pointed out that sport events of national and international interest, such as cycling, sailing, marathon, but also soft activities, (i.e. walking, hiking) with proper promotion and exposure can contribute to growth. Finally, they have indicated that sport infrastructure exists but not in sufficient numbers, while for rural special-purpose infrastructure the efforts are through the private sector and not enough.

Another issue which has been highlighted is co-operation on the development of policy between private and local government so that sporting events become a reality, and sports facilities more functional and accessible. Among other things, they unanimously stated that there is no extension of the tourism season but shrinking, and this is due to a misguided policy or non-existence of policy. The organization of sport events combined with excellent weather conditions as well as the physical and local characteristics can positively contribute to the formation of policy. They also reported that the most important obstacles to the development of sport tourism are the legislative, as well as the image of a specific brand name for Crete which is not unified and does not define Crete as an alternative destination. They specifically pointed out that attempts are made but they are not coordinated. One more issue is regional coordination of activities, spatial development, strategic planning and promotion.

Moreover, they refer to seasonality—high impact during a specific period of time—which does not contribute to the diversification of tourism, due to a large extent, to the fact that tourism flows depend on the major European tourism agencies defining the tourist map and the market. However, they also believe that the model of mass tourism should not be the identity of Crete, so it is necessary to redesign and redefine the profile through the policy for development of Crete.

In addition, it was mentioned that both sports and tourism are linked, because both are based on infrastructure and services, and these factors are at a high level in Crete. Culture, Cretan hospitality and local food are also factors which influence the relationship between sport and tourism. However, sport tourism has not been developed in the region of Crete, although there are possibilities, and the same situation for the same reason exists at the national level presenting a great lack of policy for development.

Furthermore, public administration officials agree that the state supports private investment. However, this is without specific policy and incentives, therefore individuals who absorb European funds act on their own because they are considered to be competitors to the public sector. They proposed that all sectors should work together to develop a common policy for development and change the institutional framework. These proposals include the exploitation of all sports facilities, the creation of new special facilities in the countryside, golf courses, marines etc. It is also proposed the importance of coordination, organization and unified promotion, as competitive brand name in the world market, through the differentiation of the mass tourism model. There are universal benefits, they claim, to be acquired through a unified Crete.

The second category of responses contains answers provided regarding the infrastructure of sport tourism. Infrastructures in tourist destinations and, in particular, in alternative tourist destinations are a catalytic factor in the development of sport tourism. Public sector entities separate infrastructure into sports and hotel facilities. They state that the public sector does not directly invest, and it is limited in responsibilities and tasks of coordinating and controlling tourism businesses. In addition, they noted that sports facilities are not enough, and special rural infrastructure is being minimal and based on private initiatives. Sport tourism, they emphasized, is based on specialized facilities, such as trekking, hiking, golf, countryside, which unfortunately, apart from the large indoor and outdoor facilities of the major cities in Crete, there are no other facilities, especially in the countryside, for the development of a mild form of tourism.

The government officials said that efforts made by individuals are not enough, because there is lack of funding, incentives and specialized knowledge. The money given by the EU to companies for the upgrading of sports facilities was invested only in hotel units, as a result they upgraded the facilities and services of the hotels, but this is not consistent with a holistic development of sport tourism. They point out, however, that hotel facilities are now of high quality.

Crete is ideal for the development of sport tourism. It offers dynamic, new trend, new experiences and quality of life, and emphasis should be placed on special rural infrastructures, because due to the morphological and climatic conditions. Attention should be also placed on the development of appropriate infrastructure so that the product of Crete is diversified from mass tourism to qualitative forms of alternative tourism. They also pointed out that the creation of sports facilities requires planning and policy development, but unfortunately, currently everything works through improvisation, with no belief in the dynamics of sports tourism.

Public sector bodies have agreed that, besides active participation of a visitor in sport tourism and the facilities that is one of the main factors to choose a destination, diversification of experiences, quality of life, health improvement, regeneration of the lifestyle, along with the outdoor sports facilities are the key aspects that will diversify the tourist product and will define Crete as an alternative destination in relation to its competitors. They emphasize that the natural environment, which in Crete is still preserved, is an advantage and incentive for the visitor of sport tourism. Trails and gorges that have not yet been marked would help in the development of sport tourism, after an emphasis is put on organizing and promoting it.

Apart from the advantages of the Cretan environment, there are also problems with the local community, which concern more land ownership issues but, most importantly, they are also related to the negative information and suspicion on these specific issues that contribute significantly to the development of sport tourism. The public sector bodies report the positive attitude formed by the participation in the sport tourism events not only for the local citizens but for the Greek society as a whole, since they promote health, well-being and the upgrading of the quality of life and being closer to nature.

They also agree that major sporting events contribute to the development of sport tourism, but they must be organized, systematically with a clear plan, so that the event becomes known and acquiring a brand name. Then focused actions should be made for promotion, using Crete's advantages. One fact, they all stress, is that sports events should be held in the countryside or in public places, so that they can be combined with other cultural points of interest in the city, but on the other hand, they seemed reluctant for indoor sports events. Specifically, they suggested sports events such as a road marathon, street and/or mountain bike, around historical monuments such as Knossos and Phaistos. They would like better promotion and exposure outwards, for all Crete, which would the main way (through sports events) for cities to "present" their identity.

The economic benefit for the local community, public administration officials claimed, is a very important factor that will bring money to an "inactive" tourism season for any city at a time when tourism and local businesses have a significant decrease in revenue and income reduction. Directly or indirectly, therefore, local communities would benefit at off season activity. They also agree that there must be strategic planning to promote and expose sport tourism. However, as it was already mentioned, every county has represented Crete autonomously in exhibitions both domestically and abroad, defining their city or the prefecture as "Crete". So Crete was presented in different ways as individual pieces, either popular or unknown.

After the 'Kallikratis law', the region of Crete took the initiative to create a company for development of tourism. The purpose of the company is to design, promote and expose Crete in all domestic and international exhibitions so that there is uniform exposure with a strong brand name so that the tourism product is competitive. In this effort, there should be concerted moves, parallel activities, link tourism and sport tourism, but also culture with the environment. Apart from the reports, great importance will be given to e-advertising and social media. Moreover, they also stress that sport events are a strong point of reference and promotion abroad, but Greece still has not formed a sport related tourism destination brand image.

Furthermore, public administration officials report that the level of cooperation between tourism operators is non-existent. Officials agree that they have never cooperated because they operate at a competitive level and that each body operates autonomously, having a different philosophy for the development of tourism, and more specifically for sport tourism. Public administration has been impressed by the fact that "… the private sector operates independently and faces problems coming from the public sector…". They report and agree that there is a conflict between the stakeholders of tourism because apart from the fact that everyone defines development based on their own criteria, there is no coordination and set the framework for development and cooperation where there are proven benefits for all. They also pointed out that the private sector have achieved a lot so far, but "it will be to the benefit of all actors if they can work on a common plan and vision for the development of sport tourism and tourism in general in Crete".

5 Conclusion

Based on the findings, the development of a policy for sport tourism development is necessary and is determined by the size and economic activity deriving from tourism in the local community, taking into account the wider development environment, the existing international and national economic conditions, and international tourism trends while putting emphasis on regional and local development.

The central administration, to date, has not designed, organized and implemented a policy for the development of sport tourism. Policy investigations show us that central government and policy issues have developed a broad field of study covering the role of the state, its organizations, decisions and actions (Bramham et al. 1993; Hall and Jenkins 1995; Ham and Hill 1993; Henry 1993; Houlihan 1991; Glyptis 1982, 1991a; Standeven and DeKnop 1999; Veal 1994; Williams and Shaw 1998; Wilson 1998).

However, the interview process did not show the same picture. It has been found that, apart from the lack of policy regarding sport tourism, the same lack is present at national tourism policy, with the central administration unable to reposition, redefine and recreate the tourism product in order to differentiate and gain added value against the Mediterranean and world market. Due to the lack of policy by the central government, some cities and regions tend to promote themselves their area as a destination for sport tourism. However, in these cases, it is likely that there will be cooperation with local authorities or other bodies and organizations.

Similarly, the region of Crete has not implemented a process of establishing sport tourism, through a plan with a primary objectives and specific development model based on innovative strategy. The existing institutional framework in Greece does not specify sport tourism as a growth priority and there is no specific framework of activities and at the same time there is no spatial planning. It is initially noted that spatial planning - at national and regional level - is the main obstacle to the development of sport tourism, as there is no spatial framework for alternative forms on which to base the change of philosophy and action. All these factors are acting as an inhibiting factor for investment.

It is therefore concluded that the central administration has not activated the possibilities offered by the region of Crete, initially for the enrichment, the diversification of the tourism product through the special and alternative forms of tourism, and in particular has not developed a policy for the development of sport tourism, both at national and regional level. Nevertheless, there are all prospects for differentiation away from the mass tourism model and the strong competitiveness of the Cretan tourism product in the global tourism markets, but the lack of a specific policy and the role of the central administration, both at national and regional level, remains passive without innovative actions.

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Chapter 33
International Sports Bodies Application of Ecological Sustainability Mechanisms Affecting Sport Tourism Related Natural Environment

Ourania Vrondou, Panagiotis Dimitropoulos and Leonidas Gaitanakis

Abstract Preserving a locality's environmental and social assets in a highly competitive era becomes the challenging new reality for leisure and tourism management. The appealing concept of sustainability early dictated strategy shifts for the viability of developments at the tourism sector when operating in a fast changing leisure industry. The present study, seeks to utilize the established principles of sustainable development, to be adjusted particularly to the sport tourism function. Using empirical investigation amongst key sports federations, the study aims to map and distinguish processes through which the sport function can realistically establish a sustainable environment for sport tourism-related services. Through interpretations produced from the identified environmental policies, the study aims to reveal the level and nature of sustainable considerations included in the organizational procedures of international sports bodies. In-depth content analysis of policy documents and regulations aims to enlighten their perception of sport development in relation to natural protection as well as the priority given to ecological sports behavior. The parameters deriving from a substantial sample of environmental protection policies as found in the sports leading structures help to guide an effective generalizable sustainability platform, affecting the wider spectrum of sport tourism related activities.

Keywords Sports tourism · Ecological sustainability · International sports federations · Environmental protection

JEL Classification Q5

O. Vrondou (✉) · P. Dimitropoulos · L. Gaitanakis
Department of Sports Management, University of the Peloponnese, Sparta, Greece
e-mail: ovrondou@yahoo.gr

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1 Introduction

In the context of a highly competitive leisure and tourism environment and the ever changing trends, the need for effective and viable future leads to the development of relevant services within the limits of a sustainable exploitation of resources (Chamorro et al. 2009). The examination includes an evaluation of the environmental strategies practiced by leading International Sports Federations through a critical assessment of any relevant structural and procedural mechanisms that would materialize the goal of sustainable development. The sustainability paradigm has conquered the ‘80s literature where it was recognized that economic activity would be jeopardized if natural resources failed to be renewed, thus, defining environmental sustainability as a process “which meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Report 1987). Materializing sustainability remains a difficult task especially when all societal stakeholders are involved through policy making or regulations enforcing.

2 Ecological Sustainability as a Challenging Reality

Balancing economic activity and natural environment will become the theoretical exercise to be severely questioned in the following years since the belief that still dominates literature is the fact the economic function is unsustainable by nature. Lindell and Karagozoglu (2001) admittedly declare that we know little about the transition from economic rationality to ecological rationality.

Accepting the new reality regarding nature’s deterioration unfortunately came decades after the natural capacities been severely reached. Then, the world evidently declared the need to establish the context and guidelines of the entire social, economic and natural function which in our case constitutes the main developmental platform of all leisure products and services including sport and tourism. Press and Arnould (2009) put forward the notion that there is a “growing recognition of a fundamentally resource-constrained environment and the increased salience of various global commons effects to consumers” (p. 102).

Ecological sustainability has been the subject of numerous theorists examining the relationship between the environment and the human factor of basing the social and the production function on exploitation of natural and resources which in summary refers to “the level and pattern of consumption” (Thøgersen 2010). Common’s (1995) early work emphasized vividly the intrinsic value of sustainability where nature consists of “properties of a system of which humans are a part”. It is the era of passionate ‘ecological sustainability’ where followers relate human behavior “with the continuing existence of a functioning biospheric system, rather than defining them as consumption”. “Human ways of life and the ability of the environment to sustain those ways of life” by Ekins (1994) suggests that sustainability is initially viewed as the maintenance of environmental functions to keep producing these resources (Judge and Elenkov 2005).

De Groot (1992) argued that it all comes to "the capacity of natural processes and components to provide goods and services that satisfy human needs" summarizing the environmental functions within four main areas: "regulation, carrier, production and information". Many more will attempt to categorize the sustainability function such as Pearce (1989), Turner (1990 in Ekins 1992) and Ekins (1992) as the: "Provision of resources for human activity, absorption of waste from human activity, and provision of environmental services independently of, or interpedently with, human activity".

In the 90s, several authors attempted to define this nature — economy relation despite the fact that "empirical support for the positive link between environmentally friendly initiative and profitability is still scarce and, often, contradictory" (Fraj et al. 2009, p. 263). Despite three decades of holistic theoretical processing the concept of sustainability remains a questionable practice both at an industry level but also at public policy (Common 1995). Whether an 'ethical imperative' or a 'desirable' future development environmental sustainability "remains second to that of economic sustainability to which still central governments remain loyal due to its capacity to secure future returns and quantify unquestionable economic activity" (Vrondou 1999).

Despite market's rising tension for "environmental friendly business practices" (Gadenne et al. 2009) strong ecologists present a fierce position. The human behavior and needs is not the priority, nor is the consumption procedure. Holling (1986) focuses strictly on the "behavior patterns of the ecological systems" and an ecosystem that should continue to "function in the same way infinitely, prior to and after the disturbance". This ecological approach to sustainability suggests that a system is sustainable, if it is not disturbed in any way.

Whether environmental sustainability is an ethical stance, remains difficult to evaluate, since "there is no straight and simple relationship between attitudes and proenvironmental behavior" (Grankvist et al. 2004, p. 214). Using present natural resources to their capacity diminishes the ability of future generations to exploit environmental options on the same amount and substance of natural stock. This "self-interest" question (Ekins 1992) created a big volume of literature on environmental ethics dealing with the intentional human impact on the natural environment (Field 1994). It took few decades to lead many people to a vividly declare their concern over costs and 'change' in the established lifestyle due to reached natural resource capacities. 'Biophysical' measures dictate the conditions affecting directly the human life and lifestyle becomes the core of the environmental sustainability. The question that rises though is whether the economic function accepts these measures or doubts strict ecologists' claims of unsustainable future. The role of sustainability in its capacity to sustain present human behavior through preserving the natural resources would soon be the focus of designing new policy paths (Polonsky and Rosenberger 2001).

The era of green thinking has been incorporated evidently in public policy declarations as well as industry's fast adaptation (Bortree and Seltzer 2009;

Mitchell and Saren 2008). The new reality supported the need to put forward the "application of marketing concepts and tools to facilitate exchanges that satisfy organizational and individual goals in such a way that the preservation, protection, and conservation of the physical environment is upheld" (Mitchell and Saren 2008, p. 106). The realization of scarce resources is driving firms to undertake "an environmental transformation process with the purpose of reducing the negative externalities" (Fraj et al. 2009, p. 263). The new bet from an industry's point of stance is "how environmental criteria are integrated into the marketing decisions" (Miles and Covin 2000, p. 300).

The Role of Natural Resource to Sport Related Tourism Development

Leisure forms such as sport and tourism have the ability to promote localities effectively, and on the other hand choose, create and control localities which they mark as 'destinations' or 'event cities'. Significant expressions of leisure have been critically interlinked with nature, particularly in an era where "the increasing concern for the environment makes the individuals' values and lifestyles change" (Fraj and Martinez 2006, p. 133). The gigantic leisure form of tourism bases its development heavily on the management and exploitation of cultural and equally important natural resources. Cultural and natural goods are estimated as having certain economic value, mainly as "either as a factor of consumption by the population or as a factor indirectly contributing to the increase of the economic production capacity of a region", (Cappellin 1993). Quantified in real market terms, the resources can become the essential part of tourism business development even though there is always the risk of miscalculating long term effects for the local environment.

Tourism has early been there to promote localities but also to become one of the largest threats to be recorded in areas such as the Mediterranean. Using the environment as the core resource, tourism has generated positive returns for decades provocatively ignoring ecologists' suggestions of decreasing resources plus a local environment severely disturbed by a series of man-made superstructures, nature's deterioration, exploitation of sources needed for consumption, high pollution levels etc. By the 80s the tourism industry lifecycle curve had already shown signs of decline leading tourism partners to start initiating the conversation on the need for 'intervention' which along with the rise of the sustainability paradigm became the new policy reality for the tourism sector. The way forward though would prove problematic taking into consideration the fact that tourism retrieves the same resources that social and general production mechanisms traditionally use (Mitchell and Saren 2008, p. 402).

Cultural treasures as well as natural assets are shared between different social actors presenting an unquestionable intrinsic value. "There has been a mounting public policy interest in sustainable consumption" (Heiskanen 2005, p. 179) and undeniably, "environmental protection has been an issue with remarkable staying power on the public agenda" (Thøgersen 2006, p. 153). The need for adopted tourism policy has been recognized by all sides sharing common sources leading to the rise of a vast amount of theoretical suggestions, sustainable practices, legislation and thus, policy declarations.

A number of analysts in this field suggest that that cultural and natural resources represent basic substances for the life of mainly local people and secondly for those visiting the area for a specific reason. Sustainable and fair development suggests the sharing of resources in way that would not endanger the future use by the local residents as well as their capability to produce opportunities for further development (Cappellin 1993; Hunter 1995; Komilis 1994; Murphy 1993; Silva and Silva 1993). 'External orientation' is a term often used to describe when a place is old as a product on external markets, reinforced by the 'double regional penetration' of external capital and tour operators (Manzanares et al. 2007; Vrondou 1999). Negative impacts like high leakage of income and negative environmental and social results prove this exogenous orientation when outside agencies benefit more than local residents.

Sport Affected by 'Green Thinking'
Surprisingly, theoretical attention has not been attracted sufficiently to the notion of sustainability in sport development, certainly not at the expected level. Definitional attempts have been recorded in an effort to bridge the sustainability paradigm with sports but is seems that sports competition is strongly prioritized against other aspects of the sports function. Authors dealing with the concept of sustainability in sport are few mainly borrowing theoretical dimensions from other related fields to examine sports operations. Amongst those, Lawson's work (2005) on the sustainability of social and human development through sport is characteristic, as well as that of Kirk (2004) highlighting the lack of sustainability research related to young people's participation in sport. Dowda et al. (2005) also examine resource use within a physical education program. Definitional differences as well as a great lack of relevant studies suggest the urgent need for research in the area of sustainability and sports management and organization with an international effect.

Lindsey (2008) is one of the very few examples examining sustainability in the environment of physical education and sports activities vividly urging for comprehensive analysis of all facets of sustainability applied to sports development. The study suggests certain frameworks developed through "synthesizing sustainability concepts presented in the literature on health programs and adapting them to sports development through consideration of recent policies and program" (p. 1). Similarly, Chernushenko (2001) attempts a connection between economic and environmental sustainability and effective sports facility management, as well as in the area sports tourism management (Videira et al. 2006).

Lindey's (2008) frameworks can prove to be useful here with the first framework structuring sustainability at four pillars that may be addressed by sports development programs, namely 'individual, community, organizational and institutional sustainability'. The second framework allows classification of processes that affect sustainability according to level of control held by agencies responsible for sports development and the level of integration between processes to achieve desired sports development outcomes.

The context for research in the present study remains into how sport and tourism leisure forms can base their development on positively exploiting natural resources in a sustainable mode. As in the case of tourism developing in different areas through developed relations with the regional as well as wider policy systems, similarly, outdoor sports development can contribute towards "advancing intra and inter-generational equity of access to wealth-generating natural resources" (Hunter 1995). Sport can prove to be a positive factor for regional and environmental policy when following sustainability principles (Ginsberg and Bloom 2004). An increasing income, a more educated sport-focused clientele and an increased environmental conscious, leads to a more sensitive individual towards the value of nature, the need for outdoor recreation and thus an increase of services met on natural settings (Vrondou 1999).

The lack of back up literature leads many to question whether tourism as well as sport could be part of an equitable local option since their represent significant links between 'endogenous and exogenous development factors' (Komilis 1994; Silva and Silva 1993). This fact gives additional power to the social process of policy with control and development structures applied in planning and regulating leisure forms in nature. Established in a sustainable manner, sport is directly connected with a series of factors determining the relations between the international 'command' centers as well as the internal policy schemes, the country's overall economic performance and relevant supporting legislative tools. In addition, the organizational nature of the tourism or equivalent sport international structures (i.e. tour operators and international sports federations) and their influence on developments remain a vital characteristic of this idiosyncratic field.

Defining sustainable sport and tourism development in certain localities requires a multi-disciplinary research output. Borrowing Inter alia Murphy (1993) as well as Porter's (1991) early, but significant in terms of guiding, principles on sustainable tourism development the 'multi-dimensional' character of this development is supported effectively. Seven dimensions guide this attempt of sustainable suitable to relevant developments hopefully in an effective manner since the leisure product remains one of the most sensitive and 'liquid' amongst the services' industry. 'Resource management' is prioritized here since the heart of the final experience rests heavily on the condition of the natural resources and the level of erosion being crucial part of the establishment. Similarly, 'ecological parameters' urge decision makers to sustain natural and human environments, while minimizing the effect of additional population on sensitive areas. The preservation of 'biological diversity' is vital to market the tourism and sport experience on the differentiated local character. Overall, the 'life support systems' preservation sums intensely the need to guard the basic ingredient of the sport tourism experience.

Economic features' of the activity to be generated have to be calculated in the direction of benefitting the local community therefore safeguarding social and economic sustainability. Directly linked with the experience of new and more sensitive tourism forms such as sport tourism 'social obligations' require preserving local cultural identity in an everlasting manner to give the opportunity for multi-facet future developments. In the case of sports events and relevant generated tourism activity, cultural identity has become crucial part of the sports marketing strategy leading to competition between organizers and destinations.

Sports Organizational Idiosyncrasy and Sustainability Application
Amongst the great lack of theoretical platforms to guide sustainable development Lindsey' (2008) definition of organizational sustainability comes to therapeutically impact on the study of sports development, borrowed here to examine the even more complex area of sports and tourism. The definition offered proposes that sustainability can be achieved through "the maintenance or expansion of sports development programs by the organization responsible for their delivery". In the present study, this is translated in a way that the main and international sports federations being the worldwide controlling and developing structures for every sport undertake the responsibility of securing future development of their sport as well as the environment they operate in.

A few studies have attempted to expand on this crucial aspect of sustainability with the work of Sarriot et al. (2004) been probably the most characteristic. 'Capacity' and 'viability' are emphasized here as the two dimensions of organizational sustainability. The 'capacity' dimension represents the invariable provision of services, i.e. here could translate to sport event delivery at certain predetermined level. Sustainability will be achieved only if 'viability' is obtained at financial level as well as overall infrastructural support is offered especially "sustained long after their initial funding streams cease" (Lindsey 2008). The latest can carry all the necessary international as well as local structures and resources needed to meet the organizational standards as prescribed in the international federations' technical guidelines. Swerissen and Crisp (2004) add the notion of interorganizational acceptance of the sports development program within the same sports structure in order to reach future sustainability.

For Lindesy (2008) "these conceptualizations of organizational sustainability are certainly pertinent to sports development programs" (p. 279). Mallen and Chard (2010a, b, c) propose also the concept of environmental citizenship attempting to identify literature parts that would defend the notion of sustainability able to support its application to the sport sector. Küskü's (2007) definition is used to support this effort suggesting that "all of the precautions and policies corporations need to implement in order to reduce the hazards they give to the environment (p. 75)". Furthermore, it is helpful to include, as Mallen and Chard (2010a, b, c) have faithfully done, Özen and Küskü's (2009) views of corporate environmental citizenship that introduces regulative, normative and cognitive variables into the same definitional equation. "Regulative" variables include "internal organizational systems/processes" which in the case of International sports Federation becomes the crucial point of mapping any sustainability policies. "Technological precautions" introduce advanced systems of controlling reduction of natural resources needed to accommodate the sports function. Additionally, "structural precautions" refer to the bodies' internal environmental policies and training to educate staff on green thinking and acting. This state of mind would guide the mapping of policy, financial schemes and planning in a 'green manner'. Social involvement and awareness in environmental protection are included in the "external relationship activities" variable (Lai et al. 2009). This is necessary followed by the "attitudes of top management to environmental citizenship activities" to make sustainability work at all levels.

For the purpose of the present analysis, sport environmental citizenship is defined as “the embodiment of the care, concern and actions of all parties in the sport industry in an effort to safeguard the natural environment … Constituent sport environmental citizens can include any sport corporation, organization, counsel, government entity, facility, event, or individual (including athletes) that encourage the implementation of environmental sustainability within sport” (Mallen and Chard (2010a, b, c)).

3 Methodology

The study aims to record priorities attached to nature conservation as well as social and developmental goals at the international sport federations’ level. A review of the International Sports Federations’ policy instruments investigates their willingness to achieve sustainable results. International Sports Federations included presently at the Olympic program were searched comprehensively in terms of producing specific measurements incorporated in their organizational and developmental procedures. Most importantly, specific sports sampling was based on their connection to the tourism offer either as the core of autonomous sport tourism products or as supplementary services to the existing tourism product. It is not accidental that the sample searched does not represent an exhaustive list of all Olympic Sport Federations since the sports where sampled mainly by their relation to nature. It is a comprehensive collection of available specifically environmental sustainability related documents that aims to map the present reality in the sports organization sector and how has the sustainability paradigm influenced staging and overall development of sports globally. The need “to compare theory with recent empirical information from the field” (Melton and Tinsley 1999, p. 86) is answered here across a range of environmental sports policies.

Not surprisingly, amongst all sports included in the Olympic programme the sports that appeared as most loyal towards the sustainability paradigm were the ones whose competition and event staging is directly linked with the quality and substance of natural resources. Sailing, open sea swimming and canoe tend to be synonymous to the water quality, while cycling, mountain bike and running to soil and land condition. In these cases, sports seem dependent or deeply interacting with natural resources for their competition requirements as well as whole sports existence and further development. In terms of tourism product development the same concerns seems to be extended amongst sport tourism related managers and policy makers, since this tourism form is developed on similar grounds.

The very nature of the research area suggested a qualitative approach involving content analysis. The recording sample consisted of IOC’s declarations and policy documents on reaching sustainability and five Olympic sports federations those of sailing, open water swimming, canoe, running and cycling. The analysis aims to classify the main axes on which sports bodies draw their sustainability measures as well as the development of relevant consciousness and applicable means.

Environmental sustainability is identified here in four main axes: organizational, structural, event management and local involvement.

The study aims to provide the basis on which frameworks can be developed through synthesizing sustainability approaches met in sports bodies and adopting those to different organizational and structural schemes. The analysis highlights in depth sport organization's policies relevant to environmental sustainability hopefully leading to generalizable efficient frameworks of sports operations and development.

4 Results

IOC's Impact on Sustainable Sport's Development
IOC's contribution towards a sustainable future would come as a logic continuation when operating within an ethical platform of 'changing the world through sport'. In 1992, United Nations (UN) 'Earth Summit' in Rio de Janeiro, Brazil signaled the era of a 'mind shift' towards incorporating sustainable mechanisms in all planning and managing at a global level. After a plethora of calls to preserve natural resources IOC includes the notion of environmental protection in the Olympic Charter in 1996, positioned constantly since then with the aim to "encourage and support a responsible concern for environmental issues, to promote sustainable development in sport and to require that the Olympic Games are held accordingly" (Olympic Charter 2017).

On 25 October 1999, in Lausanne there was a highly symbolic cooperation agreement signed between the International Olympic Committee (IOC) and the World Tourism Organization (WTO) as a reaction the new promising new form of sport tourism starting to affect new tourism developments as well as the creation of new destinations. It is indicative that the welcoming of sport tourism by the two organizations was expressed under the same conceptual roof of sustainable development… "convinced that, if properly directed and practiced, sport and tourism can, and should, follow the logical path to sustainable development, which was set in 1992 by the United Nations Conference on Environment and Development-the Earth Summit of Rio de Janeiro — and which is the stated aim of the International Year of Ecotourism to be observed in 2002" (Secretary General, World Tourism Organization). During this initial conference, three main areas of sustainable action were indentified. Local communities are supported to organize sports events to reinforce their local culture while producing social and economic progress. Secondly, it was vividly suggested that the environment is based on training and education and effective planning and organization of demand and facilities. Most importantly, all developments should be planned according to the needs of local residents as well as visitors in the long run. From high-level sport to sport for all, everyone's needs should be catered for.

Since then, IOC would constantly demonstrate the Games' devotion to a more sustainable future through a series of policy schemes leading to promising declarations. In 1999, IOC publishes the Olympic Movement's Agenda 21 "Sport for Sustainable Development" and in 2005, the "Sport, Environment and Sustainable Development Guide" as an illustrative tool to support the implementation of the Agenda 21. Few years later, in 2012, IOC shows progress related to this promise, providing action towards reaching sustainability in the "Sustainability through Sport — Implementing the Olympic Movement's Agenda 21". The effort proved to be constant and an established part of IOC's development as shown in the Olympic Agenda 2020 with sustainability being one of its three main pillars.

IOC seems to be interested in undertaking a proactive and leading role proposing the ambitious vision "to ensure that sustainability is included in all aspects of the planning and staging of the Olympic Games (Olympic Agenda 2020, Recommendation 4). Additionally, "IOC must include sustainability in its day-to-day operations…engage and assist Olympic Movement stakeholders in integrating sustainability within their own organizations and operations…and… cooperate with relevant expert organizations such as the United Nations Environment Program (UNEP)" (Recommendation 5).

Being one of the three pillars of Olympic Agenda 2020 those of 'credibility' and 'youth', IOC's 'Sustainability Strategy' is structured around five focus areas. Here, they are incorporated in their capacity to be included in the very operational parts of the organizers and the responsible central bodies to direct an equivalent development of their sports worldwide. Analytically:

- Infrastructure and natural sites: include sustainable management of indoor and outdoor sports operating sites as well as all organizational infrastructure during and prior Olympic Games suggesting a holistic approach of sustainable practices at all spheres of Olympic operational planning and staging. Special importance has been placed on site management in an environmental manner not only at Olympic Games settings but also at all affected city or regions.
- Sourcing and resource management: Treating all needed materials and products in terms of sourcing and managing "over their lifecycle".
- Mobility: Through effective resource management the movement of related constituent groups and items at a global level for Olympic related activity.
- Workforce: IOC promotes diversity, inclusivity and gender equality as well as safeguards the wellbeing of all workforce and volunteers of the Olympic activity offering equal opportunities for development.
- Climate: Sustainable adaptation of all Olympic planning and operations at venues and events to contribute on the minimization of the consequences of climate change.

IOC's basic 'implementation' elements receive great importance to the purposes of the present analysis in their capacity to materialize IOC's "Sustainability Management System". The notion of organizational sustainability appears to be attempted here at the top sports institution at global level in an effort to achieve sustainability. Namely:

- Top Management Policy to keep a standardized commitment to sustainability practices
- Sustainability objectives being part of the managers' evaluation having clear roles and responsibilities to meet the set goals
- All resources whether human or technical will be clearly defined in the planning and action stage plans
- Build specific skills and knowledge through awareness and educational activities
- Develop 'Key Performance Indicators' to record the progress in the right direction of the organizations
- Communicate openly all process, challenges and practices involved and invest on constant dialogue with all stakeholders involved in the Olympic process into "integrating sustainability within their own organizations and operations".

Operational requirements related to a sustainable strategy were introduced at the '2024 Candidature Process' for the first time as amended in the Host City Contract educating Candidate Cities to gradually understand the demands on contractual requirements.

These developments clearly indicate a shift of IOC's practice towards achieving sustainability but more research has to be done to realize the distance between wishful thinking and comprehensive policies applied at all levels of organizational planning, staging and development. The above declares a sincere commitment to move forward sustainably. But how will this evident commitment be translated in the sport events' reality?

Sport Federations Reaction to a Sustainable New Reality
Amongst all Olympic sports the outdoor sports were selected to be in-depth analyzed in their willingness to follow a sustainable mode of operating due to their direct relation with the natural resources. The results present a rather limited expression of applied sustainability measures adopted by Olympic sports. Most of the procedures related to any form of environmental operation would follow the national and local environmental legislation and measures without discriminating between different levels of events and local settings. However, there is optimism generated when the commitment of few certain sports to develop sustainably is recorded in detail in the present examination.

Open Sea Swimming The discipline of 'open water', which belongs to the Olympic sport of 'Aquatics', constitutes a characteristic example. The International Federation (FINA) through the "Open Water Swimming Rules" 2017–2021 (2016) seems to lack further sustainability concerns as presented on the paragraph OWS 5.3 being restricted only to the following requirement. "A certificate of suitability for use of the venue shall be issued by the appropriate local health and safety authorities. In general terms, the certification must relate to water purity and to physical safety from other considerations" (p. 8).

The above requirement suggests a competition rule protecting the health and safety of athletes and involved groups focusing on its institutional role of running existing events effectively. This stance proves the priority given by international sports bodies to the competition procedures rather than to a demonstration of environmental concern or furthermore, a holistic approach of developing and ruling sport operations through an environmental sustainability approach.

Canoe Similarly, the International Canoe federation (ICT) dedicates limited sustainability profile as presented at the official regulations observed at the "Canoe Slalom ICF Technical Deliverables". More specifically, at the paragraph OPE 14 'Obligations relating to Environmental Protection' transfers all responsibility to local organizers suggesting that "the organizer shall, at its own cost, carry out its obligations and activities under this Agreement in a manner which embraces the concept of sustainable development and complies with applicable environmental legislation and serves to promote the protection of the environment" (p. 14). However, it has to be noted that signs of change have already started to be recorded when "the ICF is proud to play a leading role in the promotion of sustainable environmental, social and economic programs, and is already a proud partner of the annual 'Paddle for the Planet' initiative highlighting the ongoing battle to keep our waterways pristine". Augsburg has been nominated to be the 2018 ICF Canoe Slalom World Cup host in July with the Mayor of the City Michael Senft enthusiastically emphasizing the important role of the local leadership towards "not just about protecting the environment, it also about providing a legacy for the local community and for generations to come".

An international movement seems to have united all those interested in voluntarily support canoe and paddle related activity through nature protection. "Paddle for the Planet" is a registered Not for Profit Organization that "unites paddlers and watermen for conservation. Paddle for the Planet aims to raise awareness and financial support for marine conservation specifically in 'Marine Protected Areas' and 'no take zones' (http://www.paddlefortheplanet.org/about-global-paddling-relay/). 'Paddle for the Planet' is supported by International Canoe Federation (ICF) and International Dragon Boat Federation (IDBF) showing signing of this movement's principles been accommodated in international events. It remains to be examined whether these principles will be translated to explicit competition procedures directly affecting sustainable practices both in terms of organization as well as local long term sustainability policies.

Running The International Association of Athletics Federations (IAAF) through the publication of "Guidelines for Environment Protection and Sustainable Development" (2010) seems to move closer to a sustainable sports practice. IOC Agenda 21 has become an influential tool to include sustainability as a vehicle for further development. The most promising action taken is the establishment of a commission for sustainable development which is also in line with the United Nations environment program (UNEP) as well as other inter and nongovernmental organizations to commonly promote environmental awareness though relevant activities such as national and local authorities, universities and sponsors.

This document seems to invest on the change of perceptions towards an ethical sporting attitude during the athletics events and training both at elite as well as recreational level. It is structured in three main sets of action having a natural resource protection direction throughout the document. A resource saving call on the basic areas of energy, water, soil, air, biodiversity, noise, waste, as well as directly linked to the events: transport, construction and merchandising are here the main focus areas to start creating an environmental sustainability policy vehicle. These ‘fields of action’ aim to encourage all parts to be active towards the same goal. Those include national federations, local government and central political authorities to act according to the above resource saving principles. IAAF will select host organizers of large international events based on the same principles proving the determination towards achieving sustainability.

Furthermore, in the above document, the responsibility lies also on the protagonists that have the power to affect public attitude towards environmental respect and protection: the athletes and the officials. In addition, this section emphasizes the individual daily behavior and its power to global change. Reusable, Recyclable, Recoverable waste become some of the main components of daily behavior emphasizing the need to focus on changing everyone’s habits.

Still, these two previous sections work more as a ‘code of conduct’ rather than a technical guideline of materializing the sustainability axes. It is the next section that comes nearer to achieve what was previously termed ‘organizational sustainability’ when promoting organizational changes and measures to secure resources. The “Exemplary conduct of sports officials” ensures that “respect for the environment and the active promotion of sustainable development are incorporated in the spirit and practice of the sports governed by these bodies” (p. 5). This urgently dictates the “set up of a commission or working group for the environment and sustainable development” as well as “the appointment of an environment and sustainable development officer” (p. 5). The IAAF, its area associations and national federations ensure that sustainable practices “are incorporated in the spirit and practice of the sports governed by these bodies”. In addition, the inclusion of all social representatives involved in the sport event and development within a certain local ground will safeguard the viability of the sport as well as the future of the city or region. IAAF positions all clubs and associations as the responsible agents to implement activities designed to protect the environment and promote sustainable development. This will reassure the spread of a differentiated sport organizational philosophy and practice at a global level.

Becoming even more practical the document aims to complete the effort by including a series of measures to be exercised at all IAAF events, thus termed ‘Green events’. Transport mode to the events, handling of large volume of waste, avoid environmental damage when running in nature, respect local ethos, the all promise a sensitive behavior by all participants. In addition, this responsibility of green behaving is expanded to ‘stadium-based’ athletics competitions presenting a series of measures to safeguard sustainability such as provide spectators with an efficient public transport system, turn to renewable energy and adapt anti-pollution systems to all venue operations and planning. Emphasized again and again, ‘respect the rules of conduct’ by all groups involved in the sports venue demonstrates that a common set of mind towards protecting natural resources precedes all other policies.

Cycling Amongst recorded efforts by the International Sports Bodies, Cycling holds a ‘green’ overall performance either as a sport or, an alternative transportation mode. Definitely, it has become one of the most popular activities during holidays supporting the offer of various relevant sport tourism services at both spectrums of passive and energetic tourism forms (Stadeven and de Knop 1999). The organization responsible to promote the sport of cycling (International Cyclist Union — UCI) proves to be faithful to the concept of sustainable development in practice and directly connect sport’s existence with natural resources: “The inappropriate management of harmful environmental effects relating to the organization of a cycling event may not only severely damage the reputation of the event itself but can also be detrimental to the sport of cycling in general” (UCI 2013). To promote the positioning of a “safety and environment manager”, under every event director’s major organizational responsibilities, proves the organizational sustainability demonstrated by the sports body. “This person can also contribute towards the environmental requirements, as safety and environmental issues are often related. The role, in this respect, is one of surveillance and taking corrective action if necessary” (p. 71).

This “Organizers’ Guide for Cycling Road Events” (2013) a 354 pages document, is essentially an eco-friendly declaration where “environmental concerns should not be the subject of a special study or specific program, but rather should be completely embedded and form an integral part of the organizational plan”. Promoting brightly the environmental character of the sport of cycling UCI suggests that it is “essential that all cycling events are exemplary in their environmental considerations” and “bring these matters to the attention of everyone involved in cycling”. UCI through a series of paragraphs promotes the need to include the environmental protection throughout all competition and event organizational parameters. The organizers’ manual includes environmental suggestions and measures running in parallel with the competition regulations throughout the whole document reinforcing the determination of UCI to realize sustainability through event management. Realizing the importance of cycling as an influencing sport in terms of promoting educational, cultural and social values the international body understands the power of sport to promote regions and localities. In these terms, UCI includes a basic question to the organizers in the process of achieving an eco-friendly sport behavior: Do the authorities have specific requirements on environmental issues? Then, urges the organizers to request any regulatory requirements on local environmental protection. UCI’s manual positions next to this effort all basic international measures to control the exploitation of natural resources supporting this commitment to achieve local sustainability based on the global need for a greener future. It is characteristic that the “Race Report” following the staging of an event dedicates section 15 towards evaluating organizers’ performance to educate participants on environmental protection though competition procedures (such as advice during the team managers’ meeting, environmental information in the technical guide). Minimizing pollution produced by involved vehicles, littering and protecting air quality become focus areas of sustainable organizational principles. Avoid polluted sites to safeguard athletes’ well being, involvement of spectators to environmental friendly behavior, control of waste and supply of recycle possibilities, manage effectively spectator parking and access, reduce number of vehicles used become practical measures to be implemented internationally.

In addition, UCI questions the organizers application of relevant green mechanisms during the event staging such as litter zones thought the course of the event etc. Along with the organizers supervision, the sport body stresses public authorities' important role in undertaking effective measures to manage waste and clean as well as an overall campaign on promoting local environment and the need for its protection. The international body passes all responsibilities regarding environmental protection to organizers to apply effective measures. Is this enough to safeguard short but also long term sustainability of local resources?

Sailing Sailing and related recreational boat activity dominated tourism areas for decades affecting destinations' image towards a quality local tourism offer. The number and intense guidance recorded in a series of "Documents for Good Environmental Practice" (2011) and in addition, the synergies between the related regulatory organizations prove the significance of exercising effective measurements to secure the core of this leisure experience. Directed to sailors, race organizers, race officials, these demanding series of documents promoted by the International Sailing Federation emphasize the realization that water and life protection is of vital importance. Starting with the "Offshore Racing Environmental Code" (2011), a guideline on good environmental practice for Offshore Races presents the initial and essential regulations in an effort to control pollution and demonstrate the sport's commitment to a clean and sustainable operation. Use of eco-friendly products and procedures such as the management of waste in a biodegradable manner, the restriction of engines' operation, use of solar and water power etc., become some of the driving principles for all users. This 'green-minded' stance becomes realistic at the "World Sailing Code of Environmentally Friendly Behavior" (2011) suggesting an energetic role regarding the protection of water areas (sea, lake, waterways) by controlling effectively five crucial areas: Garbage reduction and reuse, on-shore sewage, control fuel pollution, respect sensitive habitats and wild life and follow antifouling mechanisms.

Special attention is directed towards the phenomenon of 'biofouling'. The document describes the gathering of aquatic organisms exposed to the aquatic environment which if transferred can be a real threat to water and marine organisms and settings and could endanger relevant economic and social activity. The International Maritime Association produced a relevant document dedicated to the control and minimization of biofouling in the boat and sailing activity being a vivid proof of the real threat recognized globally (IMO 2011). The wide number of organizations included in the scheme implies that the threshold for action has been already passed with unrecorded impact. Australia, the Netherlands, New Zealand, the United Kingdom, as well as the International Council of Marine Industry Associations (ICOMIA) and importantly here, the International Federation of Sailing termed 'World Sailing' (WS) and other non-governmental organizations such as ‘Friends of the Earth International’, ‘the International Council of Marine Industry Associations, International Paint and Printing Ink Council’, along with the support of International Maritime Organization (IMO) being the international body responsible for guarding safety of shipping and prevention of marine pollution by ships — they all agreed to promote a holistic strategy to minimize danger. The fifteenth session of the Sub-Committee on Bulk Liquid and Gases (BLG) agreed that all ships’ owners and operators of recreational craft less than 24 m in length should follow this biofouling minimization effort through an appropriate ‘anti-fouling coating system and good maintenance’.

In the same lines, the “Guidance for training centers on good environmental practice” (2011), proposes a set of guidelines to be adopted by any sailing venues as a passionate effort to reach sustainability. Similarly to the above the main areas of action include: pollution control, energy and water use, waste management, wildlife and conservation. More analytically, the document proposes systems and actions to maintain clean water areas including the appropriate handling of rain water, secure waste areas, effective management of foul sewers and hazardous wastes as well as spills and polluting incidents. Waste management is emphasized as a crucial area for sailing managers in terms of reduction, recycle, reuse and storage. Energy and water use becomes another critical section urging for use minimization, renewability and overall resource exploitation efficiency. Last but definitely not least, wildlife and conservation becomes the principle where natural life is protected through the minimization of biofouling, preservation of sensitive ecosystems, raised awareness on the negative effects produced in nature by sailing and boating.

Expanded at the “World Sailing Green Event Guidance” the international body provides a guidance for all participants of the sailing events such as the Race Organizer, Race Officials, competitors and support crew aimed to ensure that a wider sustainability acceptance and practice is achieved at all levels of planning and staging. Race organizers undertake the responsibility to face all environmental impacts grading the necessary action to be taken to Level 1 for basic measures, Level 2 to resource demanding investments and Level 3 the application of high environmental event standards. In addition, the application of these measures will also have to be supplemented by local authorities’ legislation and procedures. At all events’ stages, from the pre-event planning to post-event impact, the strategy suggests a holistic approach to handling all possible environmental impacts through waste, energy and pollution control at all levels of the preparation and implementation areas such as logistics, transportation, resource use, pollution prevention, wildlife protection. An extensive checklist for event organizers is a practical guide to avoid the negative impacts proving that sustainability can be not only a state of wishful thinking but also a promising reality.

5 Conclusion

The present study attempts an insight into the dimensions and nature of environmental measures within the various developments and policy making processes exercised by the international sports bodies. The main focus was placed at the outdoor sports mainly due to their direct engagement with the natural assets supplementing or basing their experience and performance. The different evaluations, and most importantly, their eagerness to face environmental problems indicate the significance of policy formulation and the type of sustainability measures adopted by these global influential organizations. The study engaged a comprehensive content analysis of environmental policies and practices followed by the International leading sports bodies to direct the development of a sustainable sport operation.

The analysis revealed an overall limited exercise of environmental practices across international sport bodies included in the Olympic program despite the fact that IOC has early promoted the notion of sustainable sport development. IOC through the Olympic Agenda 2020 (2014) has proved to be following the global theoretical urge for a viable future development, faithfully producing volumes of sustainability related documents and guidelines. Despite the fact that this effort was significant in forming a sensitive green consciousness amongst sport policy makers, organizers, officials and participants it failed to go beyond the theoretical guidance and lead sports bodies to present tangible and practicable measures.

Sport bodies through their documentary analysis remain devotedly focused on their competition requirements and procedures, which understandably are their main role and responsibility. It is questionable whether even this limited reaction towards producing sustainability measures is a result of an increased green consciousness or a necessary contemporary marketing shift to face changing trends. Amongst a range of almost 28 sports organizations it was expected that outdoor sports and especially those that are based on natural resources would be the ones adopting sustainability considerations into their operation and development.

The crucial role of the local authorities becomes a significant result of the analysis since a large number of sports organizations base any environmental action exclusively onto the local authorities' regulatory mechanisms. Most of the sport procedures related to any effort of environmental operation would follow the national and local environmental legislation and measures without discriminating between different levels of events and volume of operation. As a result all event and sport operations will reflect environmental sensitivity equal to the range and nature of measures produced locally or regionally. In this way, sport misses the opportunity of contributing towards achieving local environmental sustainability and on the contrary, it could prove to be detrimental to localities with limited ecological regulations. Similarly, limited sustainability will be reached, when despite international federations' extensive guidelines, they avoid forcing organizers to implement those at different sites. Adversely, they depend on each organizer's willingness to exercise environmental action.

There are only few exceptions of good practices amongst all sports bodies mainly met with sports that their relation with the natural resources is inseparable. Sailing constitutes probably the most characteristic case of resource dependant sport tourism form strongly affected by natural resources while, at the same time, affect intensely the local environment. Its indispensable relation with nature drives the leading body to produce extensive regulatory mechanisms demonstrating greatest sensitivity at certain levels of sustainable operations such as garbage reduction and reuse, on-shore sewage, control fuel pollution, respect sensitive habitats and wild life and antifouling action. The fact that the sea resource faces a global need for protection drives sailing towards including a plethora of international organizations to secure all environmental protection aspects.

Similarly, cycling through a holistic approach towards sustainability develops the total of organizational and competition regulations in parallel with explicit environmental guidelines to emphasize that the viability of the sport lays heavily on exercising caution and sensitivity. UCI demonstrates mature organizational maturity and commitment when encompassing environmental protection positions within its management structure.

Sport as well as tourism operation could both have beneficial as well as detrimental effects to the local and social environment due to the mass accumulation and resource-demanded operations they oppose to local settings. Concluding, aside environmental considerations, sustainable sport tourism related developments include various economic, social, cultural, political and managerial considerations as crucial to the process. Future research should take into consideration all these different factors affecting deeply the process of achieving sustainability at all levels of environmental, social and economic level in order to produce viable sports developments.

Despite the undoubted need to secure natural resources in an effort to maintain sport and tourism activity the study suggests that it is also an ethical obligation to demonstrate sustainable thinking and proactive planning to offer identical opportunities for resource use by future generations. The protection of the natural resources is not an anti-growth scenario but a proactive behavior to avoid diminishing resources that would alter the very intrinsic core of the sport and tourism experience.

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Chapter 34
Burnout and Job Satisfaction: The Case of Physical Education Teachers in Local Sports Organizations

Evangelia Papasotiriou, Georgios Sidiropoulos, Stamatis Ntanos, Miltiadis Chalikias, Michalis Skordoulis and Dimitris Drosos

Abstract The aim of the present study is to investigate the professional burnout and job satisfaction among physical education teachers who work in local sports organizations of Attica region in Greece. Questionnaires were distributed in 9 municipalities of Attica region and 120 physical education teachers were purposively selected to respond. The research results show that on the one hand, gender isn't correlated with burnout, while age had a small but statistically significant relationship with burnout. On the other hand, men appear more satisfied than women. It was also found that organizational features affect both burnout and job satisfaction. In other words, role ambiguity reduces burnout and increases job satisfaction, while role conflict increases burnout and reduces job satisfaction. Finally, it is was observed that employees exhibited low burn out and high job satisfaction. These results confirm other studies that pointed out physical education teachers' low levels of burnout and high levels of job satisfaction.

Keywords Burnout · Job satisfaction · Physical education teachers
Role ambiguity · Role conflict

JEL Classification D23 · O15

1 Introduction

Nowadays, human resources highlight an important strategic role to organizations (Skordoulis et al. 2015; Tsitmideli et al. 2016; Tsitmideli et al. 2017). The success of any organization or workplace environment directly depends on human resource management (HRM), based on behavioral science (Chalikias et al. 2014). Thus, organizations have recognized that the emphasis on customer's needs, perceived quality or customer satisfaction have become a basis for maintaining

E. Papasotiriou · G. Sidiropoulos · S. Ntanos · M. Chalikias · M. Skordoulis (✉) · D. Drosos
University of West Attica, Egaleo, Greece
e-mail: mskordoulis@gmail.com

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competitiveness and increasing revenue (Howat et al. 1996; Chalikias et al. 2016; Skordoulis et al. 2017).The relationship between burnout and job satisfaction has received much attention over the last two decades.

Many researchers have shown that job satisfaction is directly linked to professional burnout. More specifically, low levels of professional burnout are correlated or even can be predicted by high levels of professional satisfaction (Platsidou and Agaliotis 2008; Platsidou 2010).

Burnout has been considered as the most important factor that affects job satisfaction. Schaufeli et al. (2009) state that *"the roots of the burnout concept seem to be embedded within broad social, economic, and cultural developments that took place in the last quarter of the past century and signify the rapid and profound transformation from an industrial society into a service economy"*. The knowledge of occupational burnout has significantly increased over the last two decades. Freudenberger (1974) defined burnout as the inability for job performance or the exhaustion by making excessive demands on energy, strength or resources. The individual becomes stiff and vigorously deny any change. One year later, he argued that employees who are most susceptible to burnout are those who characterized as dedicated and committed workers. More specifically, Freudenberger (1975) described three types of workers particularly:

- The dedicated and committed worker, whose excessive work affects his life,
- The worker who is overcommitted and whose outside life is unsatisfactory and,
- The authoritarian personality, who considers that no one can do the job better than him.

Maslach and Jackson (1981) defined burnout as *"a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do 'people-work' of some kind"*. Pines et al. (1980) stated that burnout is characterized by physical depletion, feelings of helplessness and hopelessness, emotional drain, the development of negative self-concept and negative attitudes toward work, life and other people.

In the field of burnout, various studies have been carried out by Christine Maslach and his colleagues (Aluja et al. 2005; Maslach and Jackson 1981; Maslach and Leiter 2008). They have focused on the measurement of burnout phenomenon among the three following dimensions:

- Emotional exhaustion, which refers to the feeling of mental fatigue and make a professional to be unable to focus at work and his tasks.
- Depersonalization, an emotional drain of an employee, which is associated with feelings such as identity loss and unreality.
- Reduced Personal Accomplishment, an aspect of professional burnout, where individuals are feeling disappointment about their accomplishments or they believe that their actions don't make the difference anymore.

For several years great effort has been devoted to the study of burnout and the factors that it causes in the field of education. Few researches have investigated individual and organizational factors in physical education teachers (Koustelios and Kousteliou 1998; Koustelios and Tsigilis 2005). However, in a study of burnout among physical education teachers in secondary education, it was found that physical education teachers didn't show high levels of burnout and they didn't feel more tired or exhausted during the school year (Amarantidou and Koutselios 2009). This result can be explained by the fact that average values were low, which confirms general conclusions that physicists in Greece as well as teachers of other subjects show high levels of satisfaction and low levels of burnout respectively (Kantas and Vassilaki 1997). Similarly, other researches which have conducted by Koustelios and Tsigilis (2005), have confirmed previous results, while their colleagues from other countries show lower levels of burnout (Kantas and Vassilaki 1997).

According to Vroom (1964), job satisfaction is an equation of all those things that an individual believes that gains from his work, to the extent that these results are actually desirable (or undesirable) for the person. Smith et al. (1969) proposed another definition for job satisfaction, which is about feelings or affective responses to facets of the (workplace) situation. Locke (1976) defined job satisfaction as *"a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences"*.

There is a correlation among employee's job satisfaction, personal life and physical health (Balzer et al. 1990). Work is considered to be more than a means of subsistence because it represents one's personal identity, self-actualization and social image (Al-Rubaish et al. 2011). Thus, job satisfaction is related to job behavior. Several researches have clearly shown that the most important factors that adversely affect employee's mental health are role ambiguity and conflict of their professional life.

Many researchers have confirmed that role ambiguity has the highest impact on job satisfaction as well as the exhaustion of employees. They have also pointed out that possible differences should be examined between different professions (Chang and Hancock 2003).

Role conflict and role ambiguity (Low et al. 2001) are important factors that can lead to professional burnout. Furthermore, it is observed that these factors have a negative influence on the employee's professional satisfaction (Argyrakis et al. 2005; Koustelios and Kousteliou 1998; Koustelios et al. 2004), on employee's commitment and thus low productivity (Jackson and Schuler 1985; Rizo et al. 1970). Furthermore, Behrman and Perreult (1984) showed that role conflict and ambiguity are negatively related to job satisfaction (Boles and Babin 1996; Jackson and Schuller's 1985). Schuller et al. (1977) revealed that role conflict and ambiguity are associated with low satisfaction, absenteeism, low participation and intensity.

In some cases, employee satisfaction was investigated in sports area (Alexander and Hegarty 2000). On the one hand, many studies have examined teachers' job satisfaction. On the other hand, few researches have studied this phenomenon among Physical Education Teachers (Koustelios 2005). An increasing number of studies have examined the relationship between these two concepts. The results of these studies have demonstrated a moderate to high correlation (Bhana and Haffejee

1996; Dolan 1987; Koeske and Kirk 1994; Pines et al. 1980). Based on the approach between the dimensions of professional burnout and its relationship with job satisfaction, a strong correlation between the three dimensions was found out: emotional exhaustion with job satisfaction and physical problems (Pisanti et al. 2003). However, other researchers have concluded that the degree of professional satisfaction may lead to professional burnout (Dolan 1987; Leiter 1988).

The purpose of this research is to investigate the professional burnout and job satisfaction in physical education teachers who work in local sports organizations of Attica region in Greece.

2 Research Methodology

For the purpose of this survey, a quantitative research was conducted, using a questionnaire that consists seven sections, which was responded by 120 physical education teachers who work in 9 Municipalities of Attica region in Greece (Marousi, Kifissia, Heraklion, Metamorfosi-Pefki, N. Ionia, N. Philadelphia, Ilion and Haidari). For reasons of confidentiality and validity, the completion of questionnaire was anonymous. The questionnaire in this study was based on the use of a five-point Likert Scale. Descriptive statistics, t-tests and correlation analysis and linear regression analysis have been carried using IMB SPSS v.20 in order to examine the research hypotheses.

3 Research Results

3.1 Sample Demographics

The sample analysis showed that the majority of teachers is by males (53%), while the proportion of women is 47%. With regard to the family situation, the majority of teachers is married (68.8%), 26.9% is single, 3.2% are divorced and the remaining 1.1% widowed. As far as it concerns the types of employment, the majority of teachers work part-time (61.5%), 33% with indefinite employment and 5.5% with permanent employment.

3.2 Organizational Factors Descriptive Analysis

In this section, the results from selected questions for the organizational factors (autonomy, workplace safety, role ambiguity and role conflict) are presented in Table 1. Regarding with the organizational factors (autonomy, workplace safety, role

Table 1 Descriptive statistics of organizational factors

		Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)
Autonomy	The job gives me a chance to use my personal initiative or judgment in carrying out the work	3.20	2.10	24.50	53.20	17
	I have enough power to do what I think that's right	4.30	10.60	33	36.20	16
	My job allows me to make a lot of decisions on my own	3.20	5.40	24.70	50.50	16
	The job gives me considerable opportunity for independence and freedom in how I do the work	0	0	16	48.90	35.10
Workplace safety	Job certainty	9.60	11.70	30.90	34	13.80
	Future Safety from this job	14.90	13.80	40.40	26.60	4.30
	The future of workplace safety	16	11.70	30.90	34	13.80
	Job stability	13.80	17	33	28.70	7.40
	I feel certain about how much authority I have	2.20	4.30	15.10	35.50	43
	I know that I have divided my time properly	3.20	8.60	15.10	36.60	36.60
	I know what my responsibilities are	1.10	1.10	4.30	35.50	58.10
	I know exactly what is expected of me	1.10	2.20	12.90	38.70	45.20
	I receive clear explanations of what has to be done	4.30	6.50	15.10	40.90	33.30
Role conflict	I have to do things that should be done differently		6.50	9.70	38.70	45.20
	I receive an assignment without the manpower to complete it	22.60	20.40	23.70	23.70	9.70
	I have to buck a rule or policy in order to carry out an assignment	18.30	26.90	24.70	22.60	7.50
	I have to work with groups who operate quite differently	22.80	13	13	37	14
	I receive incompatible requests	31.20	28	16	20.40	4.30
	I do things that are apt to be accepted by one person and not by others	31.20	28	16	20.40	4.30
	I do things without the needed resources	20.40	18.30	23.70	24.70	12.90
	I work on unnecessary things	59.10	24.70	8.60	5.40	2.20

ambiguity and conflict), it was noted that teachers have a high degree of autonomy in their work. More specifically, 53.2% of the respondents agree that the job give a chance to use personal initiatives or judgment in carrying out the work. As far as it concerns workplace safety, most participants agreed that they are satisfied about job certainty (34%) and stability (28.7%). However, teachers answered that they aren't sure about the future safety for their job (40.4%).

Finally, for the other two organizational factors (role ambiguity and role conflict), teachers have responded to a large percentage that role of ambiguity exists; while it seems that their answers differ for role conflict in some questions. It is interesting to note that for the questions about teachers' role ambiguity, they agree or strongly totally agree for the importance of clear roles and they know exactly how much power and responsibility they have in their work and what the others expect. From the perspective of role conflict, in the question workers in the question *"I have to do things that should be done differently"*, 38.7% answered that they agree while 45.2% answered that they totally agree. In the same section, the question *"I work on unnecessary things"*, 59.1% respond that they totally disagreed.

3.3 Research Hypotheses Development and Analysis

The research hypotheses that will be examined in order to analyze the relationship between burnout and job satisfaction are the following ones:

- H_1: *"The degree of burnout is related to organizational factors (role ambiguity, role conflict)"*
- H_2: *"The level of job satisfaction is related to organizational factors (role ambiguity, role conflict)"*
- H_3: *"There is a correlation between job satisfaction and the three dimensions (emotional exhaustion, personal accomplishment and depersonalization) of burnout"*
- H_4: *"There is a correlation between burnout and the demographic characteristics of the sample"*
- H_5: *"There is a correlation between job satisfaction and the demographic characteristics of the sample"*

In order to examine the first research hypothesis, the results which were derived from SPSS showed that there is a negative correlation between burnout and role ambiguity (correlation coefficient = − 0.381) and a positive correlation with role conflict (correlation coefficient = 0.440). It is noted that all correlations are statistically significant at the 95% level of confidence (sig. = 0.000 < 0.05). As far as it is concerned, H_1 is accepted.

There search results for the second hypothesis showed that there is a positive correlation between job satisfaction and role ambiguity (0.272 or 27.2%) and a negative correlation with role conflict respectively (−0.28 or 28%). These correlations are statistically significant at the 99% level of confidence and H_2 is confirmed.

Pearson's correlation coefficient was used for the examination of the third hypothesis and contains the relationship between the first section of the questionnaire (professional satisfaction) and the second section (professional burnout), which is based on Maslach's three dimensions. There is a moderate negative correlation between emotional exhaustion and professional satisfaction (r = − 0446, sig. < 0.01). It is obvious that if professional satisfaction increases, emotional exhaustion decreases and the opposite, while sig. (2-tailed) = 0.000, which means that the correlation is statistically significant at the 0.01 level. There is also a weak positive correlation (r = 0.176) between the dimensions of professional satisfaction and personal accomplishment. This correlation is rejected at 95%, but is statistically significant at the 90% level of confidence (sig. = 0.09 < 0.10). However, there isn't any statistically significant correlation between depersonalization and professional satisfaction (sig. = 0.894 > 0.05). In order to further examine the relationship between the above mentioned variables, the linear stepwise regression method was used by setting occupational satisfaction as the dependent variable and the three dimensions of burnout as independent variables (emotional exhaustion, personal accomplishment and depersonalization) (Table 2).

Two models were found to be statistically significant, with model 2 to be more preferable over model 1 because of its higher adjusted R^2. Table 3 depicts the final multiple regression models with job satisfaction as the dependent variable. The applied stepwise linear regression model has retained the variables of emotional exhaustion and depersonalization as statistically significant, for the estimation of occupational satisfaction. By looking at the sign of the coefficients it is observed that "emotional exhaustion" is negatively related to "occupational satisfaction", while "depersonalization" is positively related to "occupational satisfaction". The proposed linear regression model is the following one:

$$\text{Job Satisfaction} = -0.534\,\text{Emotional Exhaustion} + 0.260\,\text{Depersonalization} + 4.158 \tag{1}$$

Therefore, by giving values from 1 through 5 in emotional exhaustion and depersonalization, an estimation of the degree of satisfaction can be performed. According to the previous analysis, H_3 is confirmed for the two dimensions of

Table 2 Linear regression models

Model	R	R^2	Adjusted R^2	Std. error of the estimate
1	0.446	0.199	0.190	0.42190
2	0.518	0.269	0.253	0.40527

Model's 1 predictors: (constant), emotional exhaustion
Model's 2 predictors: (constant), emotional exhaustion, depersonalization

Table 3 Multiple regression coefficients

Model		Unstandardized coefficients		Standardized coefficients	T	Sig.
		B	Std. error	β		
1	(Constant)	4.269	0.170		25.126	0.000
	Emotional exhaustion	−0.0389	0.081	−0.446	−4.776	0.000
2	(Constant)	4.158	0.168		24.821	0.000
	Emotional exhaustion	−0.534	0.092	−0.612	−5.779	0.000
	Depersonalization	0.260	0.088	0.313	2.950	0.004

burnout, namely for emotional exhaustion and depersonalization, while the third variable of personal accomplishment is not included in the final model as it was fount statistically insignificant. Out of the explanatory variable, emotional exhaustion has a higher standardized coefficient making it the most important variable for the estimation of occupational satisfaction.

In order to test the fourth and the fifth research hypotheses, aOne-Sample Kolmogorov-Smirnov test was used to test the distribution of the variables concerning professional burnout and job satisfaction. According to the test's results, the distribution for both professional burnout (sig. = 0.845 > 0.05) and job satisfaction (sig. = 0.683 > 0.05), is normal.

The following table shows frequencies and descriptive statistics concerning professional burnout and job satisfaction by gender. At a glance, it can be pointed out that on average, both men and women have a low degree of professional burnout. Furthermore, based on the table's data it is concluded that both men and women have a high level of job satisfaction (Table 4).

In order to further examine the above relationship an independent samples t-test will be performed (Table 5).

Levene's test in the above table shows that equal variances assumed for both the examined case (professional burnout sig. = 0.630 > 0.05 and job satisfaction sig. = 0.668 > 0.05) (Table 6).

Thus the *p*-value for the t-test between males' and females' level of professional burnout is equal to 0.424 which means that there is not any statistically significant

Table 4 Descriptive statistics of professional burnout

	Gender	N	Mean	Std. deviation	Std. error mean
Professional burnout	Male	63	1.8298	0.47751	0.06753
	Female	57	1.7540	0.42588	0.06495
Job satisfaction	Male	63	3.5623	0.45714	0.06279
	Female	57	3.3500	0.46305	0.06903

Table 5 Independent samples t-test for the analysis of the difference between males' and females' professional burnout and job satisfaction means

		Levene's test for equality of variances		T-test for equality of means			
		F	Sig.	Sig. (2-tailed)	Mean difference	95% confidence interval of the difference	
						Lower	Upper
Professional burnout	Equal variances assumed	0.233	0.630	0.424	0.07585	−0.11188	0.26358
	Equal variances not assumed			0.420	0.07585	−0.11027	0.26196
Job satisfaction	Equal variances assumed	0.233	0.668	0.025	0.21228	0.02725	0.39731
	Equal variances not assumed			0.025	0.21228	0.02698	0.39758

Table 6 Pearson correlation coefficient for the correlation between respondents' age, burnout and job satisfaction

		Age
Professional burnout	Pearson correlation	0.190
	Sig. (2-tailed)	0.070
Job satisfaction	Pearson correlation	−0.138
	Sig. (2-tailed)	0.177

difference between these two groups. Furthermore, the *p*-value for the t-test concerning males' and females' job satisfaction is equal to 0.025. This means that there is a statistically significant difference between the two groups' job satisfaction level; thus males' level of job satisfaction is higher than this of females'.

The next step of this test is the examination of a possible correlation between age, professional burnout and job satisfaction. The results of the following table show that there is no correlation between age and burnout at a 95% level of confidence (sig. = 0.070). The same conclusion can be drawn for the relationship between age and job satisfaction as well (sig. = 0.177).

Based on the above analysis, H_4 is rejected as there is no relationship between demographics and professional burnout at a 95% level of confidence. As far as the H_5 is concerned, we may conclude that it is partially accepted due to the fact that there is a statistically significant difference between males' and females' level of job satisfaction while no correlation is found between job satisfaction and respondents' age.

4 Conclusions

The purpose of this study was to examine professional burnout and job satisfaction among physical education teachers working local sports organizations. The correlation of job satisfaction and burnout was also investigated with demographic and organizational characteristics.

The findings of this research show that physical education teachers who work in local sports organizations have a low degree of professional burnout, are highly satisfied with their jobs and men are more satisfied than women and, role ambiguity and conflict can positively affect professional burnout.

This paper has highlighted the importance and the contribution of burnout and job satisfaction among physical education teachers. Professional burnout isn't affected by gender or age. This result is contrary to the results of other studies where age is found to be correlated with professional burnout (Aluja et al. 2005).

Furthermore, it was proved that gender is correlated with job satisfaction as men have an average job satisfaction of 3.56 and women have 3.35. This difference is statistically significant due to the independent samples t-test performed. This result is not in accordance with other surveys that have found greater satisfaction to women than men (Sousa-Poza and Sousa-Poza 2007; Aydin et al. 2012). Testing the hypothesis about the relationship between age and job satisfaction, was proved that there is no correlation between these variables. This result doesn't agree with a large number of surveys that have examined the relationship between age and job satisfaction and proved that older teachers are more satisfied than younger teachers (Doering et al. 1983).

Future work should concentrate on a larger sample, since this would give more complete and accurate information. Also, the fact that this research was during an economic crisis, means that a similar research should be carried out after a few years to identify possible changes that will have to do with employees' organizational behavior with respect to the variables that were investigated in this research. Finally, further work needs to be carried out to study the relationship between job satisfaction and variables such as this of salary in order to estimate employee's behavior. This could also be combined with teachers' employment contracts because most of them work part-time.

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Chapter 35
Emotional Intelligence of Employees in the Hospitality Sector: Exploring Its Effects on Job Satisfaction and Performance

Konstantinos Koronios, Athanasios Kriemadis, Panagiotis Dimitropoulos, Ioannis Douvis, Andreas Papadopoulos and Genovefa Manousaridou

Abstract The aim of the present research is to explore the associations among the Emotional Intelligence, Job satisfaction and perceived job performance in hospitality industry. A survey instrument that included measures of job satisfaction, emotional intelligence and job performance was used to collect information from hotel employees. A case study method was used for the purpose of this research and 166 questionnaires from a hospitality organization were collected and analyzed. The findings revealed that the ability of an individual to regulate emotions and his mood has a positive and significant effect on job satisfaction as well as on his performance. Moreover, appraisal of emotions in others and social skills had also a positive impact on job satisfaction and performance.

Keywords Hospitality industry · Emotional intelligence · Job satisfaction
Job performance

JEL Classification M12 · Z30

1 Introduction

During the past twenty years (Joseph and Newman 2010), among the most prominent concerns in the fields of management and psychology has been Emotional Intelligence (EI). Various studies that were carried out showed that emotional intelligence is connected in a positive way with job performance

K. Koronios (✉) · A. Kriemadis · P. Dimitropoulos · I. Douvis · A. Papadopoulos
Department of Sport Management, University of the Peloponnese, Sparta, Greece
e-mail: konskoron@hotmail.com

G. Manousaridou
Business Administration, Aristotle University of Thessaloniki, Thessaloniki, Greece

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(O'Boyle et al. 2011), successful leadership (Goleman 2000) and expediency (Stein et al. 2009). Regarding service sector, a good interpersonal interaction between customers and staff is of high importance for customers' satisfaction, eventually affecting the company's bottom line (Ashkanasy et al. 2002). Customers could develop a positive impression, if service employees maintain a positive attitude during encounter (Lee and Ok 2012).

Organizations concentrate more on providing "service with a smile" in order to boost quality in service and consumer satisfaction, since competitions in the industry of hospitality have expanded. One very significant factor in caring for loyal customers is handling the emotional demonstration of service staff (Kim et al. 2012). It is crucial for customers to feel pleasant and human attended. Customers should feel unique and need to have positive emotions. Within this context, for the development of positive interactions among several people, emotions should be known and positively handled (Cavelzani and Esposito 2010). The capability one possesses to identify one's own emotions and the emotions of other people, and, also, to stimulate and handle his/her own feeling in an acceptable way regarding other people (i.e., emotional intelligence – EI) is crucial for his/her performance. People that possess emotional intelligence are impressionable and compassionate to the feelings and emotions of other individuals (Cheung and Tang 2009). The positive characteristics of EI could differentiate the emotional behavior of staff and, consequently, could result in increasing job satisfaction and, also, job performance.

Customers have turned to value-for-money-seekers, especially during the last years with the economic crisis, and service providers go all the way for the provision of quality service at low cost. Customers expect quality service leading to higher work expectations from staff, especially in the hospitality industry nowadays where competition is strong. Furthermore, service organizations employees are occupied with different service encounters with customers and there is a necessity to handle uncertainty on the workplace. Thus, it is certain that these employees have to handle their feelings and maintain a high performance. Emotions are significantly valuable in the hospitality industry, since employees acquire various roles, usually contradicting ones, as boundary spanners of the firm and the customer (Kim et al. 2009).

Previous research has demonstrated that there is an important association among emotional intelligence and job performance (Jennings and Palmer 2007; Law et al. 2008; Rojell et al. 2006). Nonetheless, preceding studies have shown that the linear effect model regarding emotional intelligence on job performance could be simple and inadequate (Brunetto et al. 2012; Cote and Miners 2006). As a result, there is an inadequate comprehension of the ways that emotional intelligence is connected with job performance. Moreover, there is few understanding of the relationship between employee job satisfaction, job performance and their emotional intelligence. Moreover, a lack of effort exists in the examination of these factors within the hospitality context. The aim of this research is to investigate the links among satisfaction, performance and emotional intelligence among hotel employees, contributing in the extension of prior and current work. The following part studies the literature concerning emotional intelligence and its adverse effect on the job satisfaction and performance of employees. The research methodology description and the study's empirical findings are provided. The last section provides discussion for future research implications and management policies.

2 Literature Review and Testable Hypotheses

Social intelligence showcased emotional intelligence (Lee and Ok 2012). Salovey and Mayer (1990) were one of the first people to suggest the term "emotional intelligence" and are often cited as the creators of emotional intelligence model. Their outlook of genuine emotional intelligence assimilates both intelligence and emotion and their most recent definition (Mayer et al. 2001) constitutes the most vastly accepted regarding emotional labor research (Carmeli and Josman 2006): "… the capability to recognize emotions, to approach and create emotions in order to aid thoughts, to fathom emotions and emotional knowledge, and thoughtfully manage emotions in order for someone to achieve development emotionally and intellectually" (Mayer et al. 2001). The aforementioned definition has been vastly accepted in the academic study. Mayer et al. (2001) categorized EI in four dimensions: (1) judgment of emotion in self, (2) judgment and identification of emotions is others, (3) managing of emotion in self, and (4) application of emotion to assist performance. Self-emotion judgment mirrors the ability to meticulously perceive and judge one's own emotions and to express them naturally. Judgment of other people's emotions is the ability to meticulously distinguish and fathom the internal and external emotions of other individuals. Managing emotions concerns the regulation, control or alteration of emotions in particular directions to aid positive feelings, to improve pleasant affective states during psychological distress. Emotion application concerns the capability to ascertain emotion for productive activities and for personal performance (Mayer and Salovey 1995).

Organization theory (Moore et al. 2006) showcased the concept of job satisfaction and innumerable research has demonstrated the results of job satisfaction in various disciplines (Wild et al. 2006). From the moment job satisfaction emerged as a concept, researchers and experts have shown abundant attention and interest. The term "job satisfaction" describes the pleasant emotional state that emerges from a person's subjective experience with his/her work (Locke 1976). It depicts the level to which an individual desires or meets his/her expectations at work (Cranny et al. 1992). Spector et al. (2000) described satisfaction at work as "the level to which individuals feel pleasant at their jobs".

According to Herzberg (Herzberg et al. 1959), there is a theory consisting of two aspects, one of the most popular theories in analyzing external and internal factors using affected job satisfaction and dissatisfaction. External factors are the ones relating to the environment of the job and commonly result in employee dissatisfaction in the work environment. Significant exterior factors are wage, firm's policies, job security, relationships with other people and physical working surroundings. Internal factors result in the satisfaction of the employee at work and consist of opportunities for promotion, acknowledgment, accomplishment and accountability.

The relation among emotional intelligence and job satisfaction has not been widely investigated by research in the hospitality sector. Nonetheless, literature in the social and industrial psychology has supported that EI could improve job satisfaction, since it boosts emotions of good physical condition, higher confidence and positive feelings, as it lessens non-positive affective emotions (Goleman 1995; Mayer and Salovey 1995; Salovey and Mayer 1990; Salovey et al. 1995; Schutte et al. 2002). The capability to self-manage actually gives the chance to employees to handle in a more effective way the unfavorable emotions and, as a result, avert the negative influence that would, alternatively, decrease job satisfaction, as stated by Mayer and Salovey (1995). Likewise, Schutte et al. (2002) supported that since individuals that possess emotional intelligence have the ability to notice, fathom, manage and harness emotions, are in a place to maintain or enhance pleasant moods and higher confidence and, also, to withstand negative conditions that could unfavorably influence their pleasant feeling and confidence. As a result, taken into account that job satisfaction is the disposition or emotional reactions that are connected with work situation evaluation (Mottaz 1988) and is usually acknowledged as an agent for the good physical condition of an employee whilst at work (Grandey 2000), employees that possess emotional intelligence and experience constantly pleasant disposition or contentment at the job environment could achieve a greater degree of accomplishment and job satisfaction.

Firms can also be delineated as locations in which individuals are "arranged" to work. Up to the level that work demands personal interaction between people, various emotions, such as enthusiasm, annoyance and angst are an essential part in assisting collaboration. As a result, individuals who are "emotionally intelligent" shall be more dynamic and productive within work environment interactions and along with their co-workers, consequently expanding their performance while working. Organizations as well as individuals who work, regard job performance to be exceptionally significant. Organizations demand staff that can perform very well and can commit to the ambitions of the organization, to satisfy customers' needs and expectations, and moreover, to ensure that they are continuously provide wonderful results in order to stay competitive. Researchers (George and Brief 1996) have hypothesized that the ability that an employee possesses to use emotions in order to ease performance impacts job performance, which is one of the EI defining dimensions. Some past studies have suggested the link between EI-performance. Lam and Kirby (2002), for instance, used student sample and concluded that emotional intelligence contributed to cognitive-based performance. Wong and Law (2002) concluded to the positive link among emotional intelligence and job performance when examining the relationship in work environments. In order to enhance performance, employees could either use positive or non-positive emotions. For instance, pleasant emotions, like incitement, can provoke staff to provide higher client service, accomplish their job responsibilities, or provide to the firm. Contrariwise, non-positive emotions, like angst, could assist in the employees' capability to concentrate on their job assignments. Individuals that are emotionally intelligent could be more capable of handling their own emotions and those of others in order to promote a more pleasant interaction, which could result to higher work performance (Wong and Law 2002).

The link among job satisfaction and performance is commonly explored by the organizational sciences, even though unsuccessfully determined. Subjective well-being research has proposed that work experience is versatile (Hochwarter et al. 1999). In order to fathom the motions of the job satisfaction-performance relationship within the context of hospitality industry, more productive efforts could assist in understanding the complicatedness and, maybe, the versatile nature of this relationship. Instinctively, it is reasonable to assume that those who are satisfied the most with their job would be the best performers and those who are the most satisfied would serve as an example to the best performers. Researchers have paid a widely close attention to the relations of these factors. Notably, analysis of these findings have shown inadequate reports about these relations with some research supporting that satisfaction results to performance (Herzberg et al. 1959),other results stating that satisfaction is affected by performance (Lawler and Porter 1967), and others support that the versatile relationship among these two factors is anemic to absent (Hochwarter et al. 1999). Researchers have abstained from the belief that satisfaction and performance, excluding other additional factors, entail significant effect on each other, taken into account the ominous aforementioned results.

The scope of this present research is to explore, if the EI of the employees working in the hospitality industry is connected with their job satisfaction and performance, and to which level. Based on the previous discussion the following research model and hypotheses are suggested Thus (Fig. 1):

H_1: Emotional Intelligence is positively related to job satisfaction
H_2: Emotional Intelligence is positively related to job performance.

Fig. 1 Proposed model

3 Data Selection and Research Design

A case study method was used for the exploration of the effect of emotional intelligence on job satisfaction and employees' performance. A sum of 166 successfully completed questionnaires was gathered from a hospitality organization. Additionally, secondary data from the company's website were collected and an interview with the director of the human resources department was carried out. Emotional Intelligence was measured with 33 questions developed by Schutte et al. (1998) and used also in past researches (Gignac et al. 2005; Saklofske et al. 2003). For the measurement of Job satisfaction the short form of Minnesota Satisfaction Questionnaire developed by Weiss, Dawis, England, and Lofquist in 1967, was utilized (Gunlu et al. 2010). Finally, performance measurement consisted of four items adapted from Yoke and Panatik (2016). The original scales were translated into Greek utilizing the back translation technique (Yoshida et al. 2014). Initially, the questions were translated into Greek by the researchers and the disparities were discussed. The final form was translated back in English by a bilingual professional and the verification was made by two experts in management. All questions of the central variables were assessed on a five point Likert scale and data were analyzed with SPSS software.

4 Empirical Results

At the beginning, all key variables were examined for normal distribution by estimating kurtosis and skewness. In fact, results of kurtosis and skewness between -2 and +2 are sufficient indicators of normality (George and Mallery 2003). All except for one item, which was marginally above 2, were normally distributed.

The majority of the participants were male (55.4%), engaged or married (55.4%) with monthly income from 1000€ to 2000€ (38.0%). The average respondent was 38.06 years old and he has been working in the organization for 9.54 years. In terms of education almost half of the participants held a bachelor degree (44.6%), while 26.5% had also completed postgraduate studies.

Emotional intelligence was measured utilizing 33 items developed by Schutte et al. (1998). However, recent studies contend a four factor model (Petrides and Furnham 2000) while attempts have been made for a six factor model (Gignac et al. 2005) as well. As a result an Exploratory Factor Analysis (EFA) was utilized to explore the dimensionality of EI in the sample of this research. The questions were factor analyzed using Principal Component Analysis with Varimax rotation. The items with eigenvalues greater than 1.0 and communalities more than 0.5 were retained (Hair et al. 2006). Eleven of the initial items were dismissed and the analysis of the twenty two resulted in seven factors, explaining a total of 66.21% of the variance. The Kaiser Meyer Olkin (KMO) index was 0.821 and the factor loadings varied from 0.5 to 0.815. In fact, mood regulation was resulted in two sub dimensions. Finally, Cronbach's a score was calculated, excluding three factors due to low results.

The final model of EI consisted of four factors labeled based on previous studies (Gignac et al. 2005; Petrides and Furnham 2000) mood regulation (Cronbach's a = 0.824), emotional regulation of self (Cronbach's a = 0.700), appraisal of emotions in others (Cronbach's a = 0.760), social skills (Cronbach's a = 0.712).

Initially, bivariate correlations were conducted to test the relations between the four dependent factors of emotional intelligence, job satisfaction (Cronbach's a = 0.942) and employees' performance (Cronbach's a = 0.823). All relationships were significantly correlated (Tables 1 and 2).

In order to test the combined effect of the factors of EI on job satisfaction and job performance two regression analyses were conducted (Tables 3 and 4).

Table 1 Pearson correlations (Dependent: Job satisfaction)

		MR	ER	AE	SS	JS
Mood regulation	Pearson Correlation	1				
	Sig. (2-tailed)					
Emotional regulation	Pearson Correlation	0.469**	1			
	Sig. (2-tailed)	0.000				
Appraisal of emotions	Pearson Correlation	0.442**	0.416**	1		
	Sig. (2-tailed)	0.000	0.000			
Social skills	Pearson Correlation	0.544**	0.440**	0.417**	1	
	Sig. (2-tailed)	0.000	0.000	0.000		
Job Satisfaction	Pearson Correlation	0.483**	0.378**	0.258**	0.316**	1
	Sig. (2-tailed)	0.000	0.000	0.001	0.000	

**. Correlation is significant at the 0.01 level (2-tailed)

Table 2 Pearson correlations (Dependent: Performance)

		MR	ER	AE	SS	PERF
Mood regulation	Pearson Correlation	1				
	Sig. (2-tailed)					
Emotional regulation	Pearson Correlation	0.469**	1			
	Sig. (2-tailed)	0.000				
Appraisal of emotions	Pearson Correlation	0.442**	0.416**	1		
	Sig. (2-tailed)	0.000	0.000			
Social skills	Pearson Correlation	0.544**	0.440**	0.417**	1	
	Sig. (2-tailed)	0.000	0.000	0.000		
Performance	Pearson Correlation	0.415**	0.415**	0.268**	0.281**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	

**. Correlation is significant at the 0.01 level (2-tailed)

Table 3 Multiple regression (Dependent: Job satisfaction)

Model DV: Job Satisfaction	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1478	0.355		4.161	0.000
Mood regulation	0.424	0.096	0.381	4.401	0.000
Emotional regulation	0.198	0.086	0.188	2.316	0.022
Appraisal of emotions	0.000	0.082	0.000	0.005	0.996
Social skills	0.025	0.082	0.026	0.306	0.760

Table 4 Multiple regression (Dependent: performance)

Model DV: Performance	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2182	0.303		7.189	0.000
Mood regulation	0.255	0.082	0.273	3.098	0.002
Emotional regulation	0.243	0.073	0.274	3.325	0.001
Appraisal of emotions	0.029	0.070	0.034	0.421	0.674
Social skills	−0.002	0.070	−0.003	−0.035	0.972

The proposed model was found to significantly account for 26.4% of the variance in the job satisfaction ($p < 0.001$). Mood and emotional regulation had a significant and positive effect on the dependent variable (Table 3).

The second proposed model was found to significantly account for 23.6% of the variance in the performance ($p < 0.001$). Mood and emotional regulation had also a significant and positive effect on the dependent variable (Table 4).

5 Conclusion

The purpose of the research was to explore the impact of emotional intelligence on employees' job satisfaction and performance in hospitality sector. The results indicate that the ability of an individual to regulate emotions and his mood has a positive and significant effect on job satisfaction as well as on his performance. Additionally, appraisal of emotions in others and social skills had also a positive impact on job satisfaction and performance even if in multiple regressions the impact was not significant. Moreover trying to examine the dimensionality of emotional intelligence a multi facet construct was formed which is in consistence to previous studies (Gignac et al. 2005; Petrides and Furnham 2000). However, the study did not result in the exact constructs to previous research stressing the need for potential improvement of emotional intelligence measurement.

As far as job satisfaction is concerned, the results indicate that emotionally intelligent workforce may feel more satisfied with his/her job which is line with Yoke and Panatik (2016) study. Emotional intelligence helps individuals to decrease their stress and enhance their well-being when performing their job (Brackett et al. 2010). Therefore, it is important especially for managers in hospitality sectors to recruit emotionally intelligent employees or to develop employees' competences regarding emotional intelligence. Finally, the positive outcomes of emotional intelligence regarding performance are in accordance to Sy et al. (2006) study, who stressed that employees' emotional intelligence was positively linked to job satisfaction and performance.

6 Limitations and Future Research

Various limitations of this study must be taken into consideration. First of all the research was conducted on a single organization and as a result awareness should be raised regarding the generalizability of the results. Moreover, the questionnaires were self-reported and this could lead to biased answers. Hence, future research could be conducted on different organizations taking into account multiple responses especially regarding employees' performance.

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Chapter 36
Enhancing Airports' Employees Job Satisfaction with Training Techniques. Investing on IM.I.A. and the Case of Greek Airports' Ground Handling Services

Dimitris Papayiannis, Sofoklis Skoultsos and Alexios-Patapios Kontis

Abstract Airport ground handling executives and airport employees' trainers in most cases need to improve their pedagogical skills in order to train employees to meet airports' quality objectives. The scope of this article is to suggest efficient training on the job methods in order to assist airport instructors and executives in their on the job training skills. Thus, to improve employee's satisfaction and ultimately, to increase their performance. Firstly, an examination of the theoretical approach is made on Quality Circles, Greek Tourism Industry and Greek Airport Facts and Figures and results of secondary research. Then examines employees' training methods and suggests the findings of an empirical research approach for trainers and executives—via Field Study—in five Greek Airports. In particular, suggests as training scheme that focus on employees' Soft Skills, such as Imagination, Innovation and Adaptability (IM.I.A.).

Keywords Training techniques · Greek airports · Employees' performance IM.I.A

D. Papayiannis (✉)
University of Western Attica, Athens, Greece
e-mail: papayiannisd@gmail.com

S. Skoultsos · A.-P. Kontis
University of the Aegean, Mytilene, Greece

S. Skoultsos
Hellenic Open University, Patras, Greece

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1 Introduction

Enhancement of employees' skills within the Airport Industry is an important aspect, since most of the time they interact with passengers and the overall task to be performed necessitates employees that are able to deal with all kind of passengers' needs and wants. Executives face difficulties on how they can improve all kind of employees' skills who interact with passengers in most time of their shift. On the job training it is more convenient and less time consuming for them to give emphasis to routine tasks and to technical skills. Furthermore, in Training Centers, instructors face the same obstacles when training of participants of various ground services of airports occurs.

Moreover, employees need support when performing their tasks especially when are in front line working positions and encounter the needs and wants of passengers.

Living space for initiatives potentially facilitates management and employees' motivation.

Yet the unique challenges that an executive meets in practice when is performing as an instructor and/or as an executive, constitute the *Imagination, Innovation, Adaptability (IM.I.A.)* concept—as part of Soft Skills improvement—a potential powerful tool for airport employees' increased performance (Papayiannis et al. 2015).

The main hypothesis here is if Training Methods that give an emphasis on Soft Skills' improvement such as IM.I.A. within the current overall environment that the Greek airports are operating in, could assist employees to increased job satisfaction.

The purpose of this article is to identify efficient pedagogical approaches within theairport ground handling management. Instructors in Life Long Training Institutions as well executives on the job training could be the beneficiaries for increased employees' satisfaction and productivity.

In the first section, an examination of the theoretical approach is made on Quality Circles, the Greek Tourism Industry and Greek Airport Facts and Figures.

The second part analyses the findings of the Field Study on pedagogical approach tested on Airport ground handling services employees, implemented by Life Long Training Centre.

Moreover, it examines the characteristics of the Greek Tourism and Aviation Industry and their implications and finally, proposes training methods for improving airport employees' performance.

2 Methodology

The methodology of this research was based on two main pillars. Secondary Research and Field Study. In specific:

2.1 Secondary Research

A theoretical approach on secondary data took place examining the topics of:

- Quality Circles
- The Greek Tourism Industry
- Greek Airport Facts and Figures.

2.2 Field Study

On the Field Study emphasis was given in the planning, implementation and evaluation of 5 different groups of twenty students each—100 in total—in 5 Greek Airports, one in Athens International Airport, and in four other airports of Greece: Chania, Heraklion, Kos and Rhodes. The duration of each seminar was one week each with additional time for individual research before or after lessons.

The method that has been used was the formation of Quality Circles with setting the objectives for each group by the participants themselves.

The implementation took place during February 2017—to April 2017 in 5 Greek Airports. The sample included by trainees, mainly front line employees encountering passengers on a daily basis throughout their shift in ground handling services (*See* Table 1). The members of the groups, where airport ground handling executives as well as employees.

During the implementation "Bottom up" approach was used with various implications to both Life Long Learning Institutions and Airports. In the latter case, this approach could implement in training sessions on the "job training" with respective results.

Table 1 The field study sample. Employment and personal characteristics of trainees

Characteristics	Percentage	Percentage
Sex	Female (70%)	Male (30%)
Age	24–36 (60%)	36–55 (40%)
Education	Higher education (23%)	High school (77%)
Type of employment	Full time (45%)	Part time (55%)
Sector	Service 38%	Hospitality 62%
Time pressure	Yes (92%)	No (8%)
Guest encounter	Yes 95%	No 5%
Occupation (departments)	Airport ground services 82%	Back office, clerical work 18%
Seasonal	Yes (60%)	No (40%)
Location of airport	Athens airport 55%	Rest of Greece 45%
Size of airport	Small to medium 30%	Airports with more of 500 employees 70%

Source The authors

2.3 Limitations

The major limitation of the Implementation of such teaching approaches methods is that the results of each individual/participant of each group has performed is very difficult to be measured. Although the deliverables and the group work are clear, the degree of the participation of each member of the group is yet not satisfactory clear.

Moreover, the nature of the objective set, the experience of the participants along with their background, constitutes the setting of objective performance criteria, a complex task.

3 Team Work Practices/Quality Circles

Definition of Quality Circles: They are small groups of employees 5–20 persons who perform the same or similar work, come together at regular intervals to determine the causes of labour problems that arise in the workplace, suggest solutions to senior Management of the company and responsible for implementing their proposals, if this is possible.

The problems with which the members of a Quality Circle are involved are mainly the following:

(a) Improve the quality of manufactured products,
(b) Conditions of safety,
(c) Reducing production costs,
(d) Improvement of the production process but even with problems of the overall improvement of quality of life in the workplace.

Quality Circles are not part of the official structure of the enterprise or the organization. They are formal Project Teams, with the traditional sense, that operate in parallel with the official structure. They lack the principle of authority, as expressed in the relationships between executives and subordinates—existing in a typical project team (Departments, Administration etc.). Another key element that distinguishes Quality Circles from traditional formal working teams/group sis the voluntary participation of members and the free withdrawal from the group if they wish. Quality Circles operate in parallel but independently of the formal organization of the firm for the success of their own goals, ideally defined by the base (team members).

Quality Circles have their own organization and differ greatly from traditional organizational structures operating in businesses in Western Societies such as: Task Force, Semi-autonomous groups learning groups in the workplace. These differences mainly refer to: (a) the clarity and advance fixing of team objectives, (b) the leadership of these teams, provided by members of senior Management (Task Force), (c) the main object of interest, (d) to the extent of flexible participation and withdrawal of members from the group (Semi-autonomous work group) and (e) the subject employees' education (Drucker 1981).

4 Overall Environment and Characteristics of the Greek Labour in Aviation Industry

It is worth mentioning that each Quality Circle is unique. Thus, the airport ground handling manager or the instructor respectively must elaborate IM.I.A. not only with the different variety of employees/trainees experiences and backgrounds but also has to take under serious consideration the overall PEST environment that the Airport is operating in. This is if for instance, the Political. Economic, Social. Technological (PEST) environment which is as also called «Hostile», the airport management should take this fact into account when formulating the Quality Circle/ team. In particular, when for instance the overall economy of a country is under recession, he would act differently as the overall economy is at its best. By the same token employees'/trainees' values and attitudes may vary among participants of the team—Quality Circle, thus once again, selection of members should be granted as very important.

Furthermore, by the term «Hostile» environments probably a wide area of variables—beyond economic recession—could be included. The micro—environment of the airport or the training provider is a good example when interpreting hostile environments. Loans, debts, shortage of employees, new emerging tourism destinations, and shift of passengers' expectations are namely some examples of hostile environments. In addition, the characteristics of tourism employment are in brief as follows:

- labour intensive
- the majority of the workforce has limited qualifications and attracts workforce from other service sectors which face recession
- time pressure mainly due to the encounter with guests
- high demand fluctuations (seasonality), This accounts annually, monthly weekly and even on a daily basis
- low salaries of employees and executives in comparison with other service industries
- complex services
- diversity of tasks
- managers face difficulties to measure employees' performance and satisfaction (Papayiannis 2003).

More analytically, labour is a factor of major importance in the economic analysis of productive activities, and this is also the case for the tourism industry. In general, tourism activities are relatively labour intensive and thus there are many expectations surrounding the impact of the development of tourism on a country's employment and on the personal income of the labour force.

Tourism presents peculiarities that have to be taken into consideration when employment is concerned. In many cases, visitor consumption, particularly which associated with inbound tourism, is not evenly spread over the year. As a consequence, employment in tourism activities will fluctuate seasonally, often with more intensity than in other sectors.

Seasonality, high variability in the work conditions, flexibility and the lack of formality of many work contracts in many small producing units are the major obstacles for deriving meaningful figures related to employment in the tourism industry. This explains why, although there is no doubt that employment is a crucial variable for the description of the economic importance of tourism, statistical limitations do not allow to be very ambitious for the time being.

As labour is a factor of production, involved in a production process, the same difficulty arises as that concerning Value Added. How to associate employment with tourism consumption is rather difficult task. The analysis of the employment admits different focuses and is conditioned by the availability of the information. An initial argument is that such an analysis can refer only to the employment generated by the activity of tourism industries (direct employment) or include also that employment generated in connected and non-tourism specific industries (indirect employment): in both cases the term "generated" refers to the response of such activities to visitor consumption.

It could also be argued that a supply approach to employment that would allow to consider all its relevant characteristics (such as jobs, self employed or full-time equivalent, gender, etc.). However, a demand approach to employment would require the use of tourism ratios for all activities (which might be controversial) but does not allow to go much further than deriving aggregate numbers; little could be said about the composition and structure of employment (Rerries 2012).

5 The Tourism Industry in Greece

In addition to the above, the Greek tourism industry has some characteristics that contribute further to the complexity of its overall assessment. In brief the Greek Tourism Industry has the following facts (See Table 2):

Greek Tourism Industry in Brief

- 12.6 billion Surplus of the travel balance in 2017. An increase of 10.5% in tourism receipts
- Surplus of €11 million showed the tourism balance last December, down 76.3% from a surplus of 45 million in the corresponding month of 2016.
- According to the Bank of Greece this is due to a 26.5% increase in tourism payments (December 2017: €172 million, December 2016: €136 million) compared to a 0% increase in travel receipts, 8% (December 2017: EUR 182 million, December 2016: EUR 181 million).
- The increase in travel receipts is due to an increase in average travel per trip by 1%, as incoming travel traffic declined by 0.3%.
- Net receipts from travel services contributed 2.4% to total net receipts from services and offset the goods balance deficit by 0.7%.

Table 2 Current facts of the tourism industry in Greece 2018

Characteristics	Facts&Figures 2017
Global tourism demand	+4,7% (2017) in comparison with 2016
Tourism demand in Greece	+22,7% (2017) increase in comparison with 2010
Tourism demand in competitive countries	Portugal (+11, 3%) Spain (+7, 2%) Turkey (−5, 5%) Croatia (+2, 7%) in comparison with 2016
Total tourist arrivals	28 million (2017) 15 million in 2010
USA tourist arrivals	600.000 28% increase in comparison with 2010
Russia tourist arrivals	1,2 million (2017) 190% increase in comparison with 2010
China tourist arrivals	37,2 thousands (2017) 243% increase in comparison with 2010
Tourist arrivals by cruise ships	2,5 millions 1, 5 million in 2010
Tourist arrivals in Greek airports	44% increase (2017) in comparison with 2010 Kalamata: +258% Myconos: +152% Santorini: +91% Herakleion: +55%

Source The authors based on Hellenic Statistical Authority 2018 Edition, Hellenic Aviation 2018

- In 2017, the travel account showed a surplus of €12,680 million, up 13.2% from a surplus of €11,201 million in 2016.
- As noted, this development was the result of an increase in tourism receipts by €1389 million or 10.5%, and a €90 million reduction in travel payments by 4.5%.
- The increase in travel receipts is mainly due to an increase in incoming travel traffic by 9.7% and secondarily to an increase in average travel per trip by 1.4%.
- Net receipts from travel services offset a 69.1% deficit in the goods balance and contributed 72.9% to total net receipts from services. (Bank of Greece/INSETE 2018).

Tourism Receipts

- In December 2017, as reported by the Bank of Greece, travel receipts grew by 0.8% compared to the corresponding month of 2016.
- More specifically, EU-28 residents' revenues fell by 5.4% to €96 million, while non-EU-28 residents grew by 8.8% (December 2017: 84 EUR million, December 2016: EUR 77 million).
- The decrease in EU-28 residents' revenues was the result of a 9.2% decrease in the receipts from euro area residents (December 2017: EUR 58 million,

December 2016: EUR 64 million); as EU-28 non-euro area residents increased by 1.3%.

- In particular, for the most important countries of origin, the receipts from France remained relatively stable at 4 million while those from Germany declined by 19.2% to 14 million. Increase by 7.8% the United Kingdom's collections, which amounted to 17 million,
- Out of non EU-28 countries, a decline of 31.4% was recorded in Russia's revenues of 4 million, while those from the US declined by 19.5% to 12 million.
- Throughout the year, travel receipts increased by 10.5% compared to 2016 and amounted to €14.596 million.
- This development is due to a 13.8% increase in EU-28 residents' revenues, which amounted to EUR 9843 million, and to an increase of 5,6% in receipts from residents of countries outside the EU-28, which amounted to EUR 4327 million.
- Analytically, the receipts from residents of euro area countries increased by 20.6% to €6270 million, while EU-28 non-euro area residents grew by 3.6% and amounted to EUR 3573 million.
- In particular, receipts from France amounted to €992 million, up 17.3%, while receipts from Germany increased by 31.5% to €2553 million. Revenue from the United Kingdom also increased by 11.6% to €2.061 million.
- From non-EU-28 countries, a decrease of 3.6% was recorded in receipts from Russia, which stood at EUR 418 million, while those from the US grew by 4.4% to EUR 803 million(Bank of Greece/INSETE 2018).

Incoming Tourism Arrivals

- In December 2017, incoming travel traffic stood at 563 thousand travelers, showing a small decrease of 0.3% compared to the corresponding month of 2016.
- In particular, airport traffic grew by 3.5%, while road traffic dropped by 7.4%. This was a result of a 10.1% decrease in travel by EU-28 countries, as travel from non-EU-28 countries increased by 14%.
- More specifically, travel from the euro area countries totaled 142 thousand travelers, down 6.2%, while travel by EU-28 non-euro area countries also declined by 13.2% % (December 2017: 159 thousand, December 2016: 183 thousand).
- In particular, travel from France declined by 10.7% to 8 thousand travelers and that from Germany fell by 3.5% to 38 thousand travelers. Travel traffic from the United Kingdom increased by 24.0% and stood at 44 thousand travelers.
- In the case of non EU-28 countries, the travel traffic from Russia, which stood at 9000 travelers, was 22.2% lower, while US travel traffic increased by 13.4% and stood at 26 thousand travelers.

- At year-on-year, inbound travel traffic grew by 9.7% to 27,194 thousand travelers compared to 24,799 thousand travelers in 2016.
- In particular, airport traffic grew by 9.9%, while road traffic increased by 8.7%.
- Traveler traffic from EU-28 countries stood at 18,583 thousand passengers, up 7.9% compared with 2016, while travel from non-EU-28 countries increased by 13, 6% and stood at 8611 thousand travelers.
- Travel by the Euro zone area countries increased by 10.4%, while that of the EU-28 countries outside the euro area increased by 5.3%.
- In particular, travel traffic from France increased by 8.1% to 1420 thousand travelers, while that from Germany grew by 18.1% to 3706 thousand travelers. Travel traffic from the United Kingdom increased by 3.7% to 3002 thousand travelers.
- For non EU-28 countries, travel from Russia declined by 1.1% to 589 thousand travelers, while that from the US increased by 11.1% to 865 thousand travelers (Bank of Greece/INSETE 2018).

Airport Arrivals

Athens International Airport is the largest airport in Greece and this is shown by the numbers of arrivals of passengers from many countries of Europe and the world. In specific, the following table shows the passengers who landed at Eleftherios Venizelos Airport on the basis of nationality are in year 2016 as follows (Table 3):

Other tourist arrivals by air in Greece, beyond Athens International Airport, also take place. Greece is a country with a number of aviation infrastructure and charter flights, with the result of tourists arrivals in other Greek regions namely in Thessaloniki and in some tourism developed islands other than Athens. In the table below, (Civil Airport Authority 2018), arrivals of the last three years in the five busiest airports of Greece are shown (Table 4):

Table 3 Tourism arrivals in athens international airport by country of origin

Countries	Passengers
Domestic (Greece)	7,322,350 (2017)
Germany	1,416,031
Italy	1,413,432
U.K.	1,294,725
Cyprus	1,008,913
France	953,797
Swiss	667,615
Turkey	665,526
Spain	405,164
Netherlands	380,366
United Arab Emirates	369,129

Source Civil Airport Authority, Annual Statistics 2018

Table 4 Tourism arrivals in 5 major Greek airports

Airports	2015	2016	2017
Athens International Airport	12,087,377	20,016,998	21,737,787
Macedonia (Thessaloniki)	5,341,293	5,735,581	6,395,523
Nikos Kazantzakis (Herakleio)	6,057,355	6,865,681	7,480,408
Diagoras(Rhodes)	4,579,023	4,942,386	5,301,517
Ioannis Daskalogiannis (Chania)	2,702,283	2,966,697	3,042,903

Source Civil Airport Authority, Annual Statistics 2018

6 Training in Practice in Airport Ground Handling Management

The Training Approach

Secondary research indicates that the overall environment of the Greek tourism industry, Greek airports, as well as unique employment characteristics play a vital role when any kind of training techniques are implemented. Thus, variables such as increased inbound tourism demand may have as a consequence, high volume of first entry employees in limited time with limited time for training. Therefore, training techniques that give emphasis on soft skills, which are time consuming, may be abandoned in practice, in favour of training on technical skills, which can be implemented in short sessions. Any kind of economic or political changes should take into consideration before implementation of innovative training techniques.

The IM.I.A (Imagination, Innovation and Adaptability) concept could be used in Airport ground handling services in practice well as tourism training providers. Notably, it has also been implemented in the Greek Hospitality Industry in practice (Papayiannis et al. 2015).

What is important on the “Bottom up” training approach, is to give space to employees/trainees to build up with no limits and borders their own goals and objectives.

In contrast, the classical “instructing” top-down approach should be inefficient and thus will minimise the potential abilities of the participants.

Moreover, in the case that complex tasks needed to be performed, the Bottom up approach is more likely to succeed in terms of productive ideas. On the contrary the top-down approach is more likely to be efficient on daily routine tasks that not require anything else but obedience (Papayiannis 2003).

Formulating the Team Work Attitude

Selection of members of the team is a prerequisite for the efficient workflow of the overall task. In addition, according to each unique qualification that each member has, can actually work as team member later on when contribution of all is required.

It is important to emphasize that participation in such teams is on a voluntary basis.

Facilitation by Airport ground handling management—Lifelong Learning Centres

Both the Airport ground handling management when training on the job is fully accepted and Lifelong Learning Centres should facilitate all needs and wants of the members of the team.

For instance if the actual formation of the team needs to be set out of the working hours, then the management need to provide the appropriate meeting room.

6.1 Fostering IM.I.A. Culture to the Team

Fostering Imagination, Innovation and Adaptability (IM.I.A.) culture in the formatted team requires the following steps taken by the instructor/manager of the Airports Ground Handling Services:

- *Creating Class Culture*
- *Describing aims and Goals*
- *Set expectations*
- *Brain storming*
- *Suggestions/alternatives*
- *Implementations*
- *Propose and evaluate*

Setting Goals and Objectives

Setting the team Goals and Objectives is crucial. The team highly respects these objectives since they are not instructed by any other senior executive or is not part of the routine daily tasks need to perform on a daily basis. Therefore, the sense of pride is involved for a "job well done". The team leader that arises among other members of the team, due to soft skills he/she has, takes initiatives and the burden of failure or success of these set objectives.

Proposing and Suggesting

The team then proposes and suggests solutions and alternatives either to the senior management or to the team itself, in order to proceed to implementation. In the latter case, the team feels more obliged to achieve the objectives that have set for its self.

Implementing

The implementation of the task is rather a priority than an obligation on behalf of the team members. In fact they are looking forward to see if what they proposed can be implement in reality. Since the management has authorized them to implement their own proposals the overall members' job satisfaction will be increased. Furthermore the degree of this satisfaction lasts even when the team will end its task and members will go back in their usual working positions. In the case of Lifelong training institutions, where students-members of the team go back to their hotel organizations still the overall job satisfaction remains strong at least for a short period of time.

In addition, if the management of the respective hotel will follow the proposals and suggestions of the team, then the grade of job satisfaction will further be increased.

Performance Appraisal

As an aftermath, the team makes a self-assessment both for their overall performance as a team and of the individual input of each member. Is crucial to mention that this evaluation is been made by the members themselves and not by the senior management.

6.2 Methodological Approach of Training Employees in Greek Airports' Ground Handling Services

The Training Technique in question has already been implemented in 5 different groups of 20 students each, during February 2017—to April 2017 in 5 Greek Airports organized by Life Long Learning Institution. The participants where from various target groups within the airport service sector and in particular from various ground handling services. In brief the results where the following:

(a) Evaluation of these training seminars clearly have shown that participants are more prone to set the standards of their performance especially when are dealing with complex tasks.
(b) Soft skills played a vital role when group work was to be performed. On the other end however, the performance of each participant may depend on previous experience, and other characteristics of soft skills that in some cases may not be adequate for exceptional results.
(c) During implementation of the seminar the "Bottom up" approach was used with various implications to both Life Long Learning Institutions and Airports ground handling services.

In the latter case, this approach could implement in training sessions on the "job training" with respective results. More analytically:

Lifelong Learning Centers/Airport Executives

The IM.I.A. Concept applies equally to both Lifelong Learning Centers and Airports'ground handling executives. The former gives the opportunity to students/

trainees to enhance their potential in class while as the in the latter case the airport ground handling employees can increase their productivity.

Means of Facilitation

Provide to trainees/students and employees all necessary means in order to facilitate their work. Delete obstacles and provide them the appropriate tools for self-development. In turn complex tasks that require mental input will be solved with less effort.

6.3 Enhancement of Soft Skills

Enhance all types of soft skills in order to adjust each one of them in the respective situation in the work place or in the class.

6.4 Fostering IM.I.A.

With the use of interactive teaching methods, the IM.I.A. Culture could be fostered among participants. That is, investing on soft skills improvement, such as use of Imagination, being Innovative and be able to Adapt under various external and internal circumstances. In specific the following tools could be used in practice:

- Team work (ground handling services)
- Role playing (passengers vs employees)
- Case studies with actual daily tasks (handling passengers complaints)
- Simulations with current airport facts (employees sickness with increased demand)
- Brief Assignments and Essays

Formation of Quality Circles

Formation of Quality Circles is only one potential tool that might be used if the instructor/educator/airport ground handling manager will decides that this is the most appropriate, if all other variables are suitable for the case in question. Once again, if the overall environment as well qualifications of the target group and nature of the task are favorable, then the choice of Quality Circles could be useful.

Achieving Goals and Objectives

The means to achieve goals and objectives is also important. The team—Quality Circle—are more prone to implement projects, problem solving techniques and so on. Moreover, when the team will actually materialize the outcome of their work can more easily to transfer the results or at last the methodology use in their own working environments. In particular, the experience gained by the methodology used in the Lifelong Training Centres will be very useful in the training sessions and the team formulation in Airports' ground handling services.

Self-Actualization and Overall Performance

Self-Actualization and thus this would increase the overall performance both employees as well as students.

Passenger's Satisfaction and Profitability

As an after math employees' or/and trainees participation in such training pedagogical seminars will increase job satisfaction and consequently to a better job performance. Thus, this will lead to a potential passenger's satisfaction and increased airports' profitability.

ENVIRONMENT—PEST Analysis

Instructors always should take under consideration the overall environment that the Lifelong Learning institutions or the Aviation Industry is operating in.

A political, economic, social and technological assessment is vital. Thus in each specific variation an instructors should be able to adapt new tools and pedagogical methods. As Secondary research has shown the Greek tourism industry faces some unique characteristics same as occurs from the airports' employment point of view.

7 Conclusions—Recommendations

The IM.I.A concept could be used in the Airports Management in practice for both Ground Handling Services as well as training institutions.

On the other end, the Greek Aviation Industry faces some employment characteristics. These are (a) Small size of most Greek Airports, (b) labour intensive (c) the majority of the workforce has limited qualifications and attracts workforce from other service sectors which face recession, (d) time pressure mainly due to the encounter with passengers) seasonality, (f) low salaries of employees and executives in comparison with other service industries (g) ground handling services managers face difficulties to measure employees' performance and satisfaction.

Since every Quality Circle is unique, the ground handling manager or the instructor respectively must elaborate IM.I.A. not only with the different variety of employees'/trainees' experiences and backgrounds but also has to take under serious consideration the overall PEST environment that the respective airport is operating in.

Thus, the findings of the Field Study in Greek airports'ground handling services can be summarized as follows:

Trainers should rely on the "Bottom up approach" pedagogical techniques, i.e. give space to employees and trainees to build up with no limits and borders their own goals and objectives. In contrast, the classical "instructing" top-down approach should be inefficient and thus will minimise the potential abilities of the participants.

Moreover, in the case that complex tasks needed to be performed, the Bottom up approach is more likely to succeed in terms of productive ideas. On the contrary the top-down approach is more likely to be efficient on daily routine tasks that not require anything else but obedience.

In conclusion, IM.I.A. Training Method could prove useful tool for enhancing both airport ground handling employees' and trainees' involvement in decision making and thus to increase self-motivation and ultimately to job satisfaction. The Quality Circles might be used in practice; however it is up to the instructor/manager to choose the appropriate pedagogical method.

He can use his/her own Imagination, Innovative approaches and his/her Adaptability to the specific Political, Economic, Social and Technological parameters given to each particular airport.

Even if the participants are not adequately able to perform in such team working conditions he/she could find alternatives by using the IM.I.A. Concept.

Lastly, further research is required related to the Aviation industry, in order to have more concrete and definite conclusions. Nevertheless, the aforementioned approach remains valid and could be used as a key element for further research concerning human capital in Aviation Industry.

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Chapter 37
Examining the Organizational-Financial Structure of Public-Private Destination Management Organizations

Isabel Carrillo-Hidalgo and Juan Ignacio Pulido-Fernández

Abstract Public-private Destination Management Organizations are considered to be one of the best destination management formulas to guarantee the sustainable and competitive development of tourism. Furthermore, they give greater weight to the private sector in decision-making, since the latter is part of the destination management structure. These organizations are characterized, in theory, by lesser dependence on the public sector in budgetary terms, which is deemed to alleviate the finance and funding problem faced by destination management. Hence, it is interesting to know which of the world's biggest city-destinations manage tourism through a public-private Destination Management Organization and to examine the legal, organizational, functional and financial structure of such entities, thus assessing their suitability in accordance with the provisions of scientific literature. Ascertaining the views of these entities themselves about different sources of finance and public-private collaboration can help us to understand the results obtained.

Keywords Destination Management Organizations · Tourism management · Orgaizational structure · Financial structure · Functional structure · Public-private cooperation

1 Introduction

Tourism is a mass phenomenon that, ever since it became established as such, has grown at an astonishing rate no other industry has been able to imitate, even surviving successive economic and financial crises.

As tourism has grown, so has the interest shown by destinations in increasing the volume of tourists they attract. With this aim, many destinations around the world have set up organizations responsible for managing and/or promoting tourism. These are known as Destination Management Organizations (DMO, hereinafter).

I. Carrillo-Hidalgo (✉) · J. I. Pulido-Fernández
University of Jaén, Jaén, Spain
e-mail: ihidalgo@ujaen.es

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When managing tourism, managers must be aware of the increasingly complex ecosystem that is tourism within any given destination, and must identify, define and understand the different stakeholders that make up this ecosystem, as well as the relationships between them, their interactions, and the competitive environment (Manente 2008).

Hence, greater cooperation in destination management is required, in which decisions are not made unilaterally, but rather through interaction between the actors that are involved in and affected by tourism. Hence, management should be approached from the perspective of governance (Martín and Merinero 2010).

The maximum expression of this public-private collaboration within the sphere of destination management are public-private DMO, which are also considered a key tool in the area of governance.

Destinations in general and DMO in particular are facing a problem in terms of finance and funding. This problem is rooted in the constant growth of tourism, referred to above, which has given rise to a growth in supply that is not accompanied by adequate planning of the investments required, eventually affecting the sustainability of the destination and its competitiveness.

Some destinations are facing serious budgetary problems, since the *de jure* population, which must assume the fiscal burden, is much smaller than the de facto population (which includes tourists and second home owners) (Izard et al. 2010), and thus the local finance system cannot cope (Biedma 2010; Bodlender 1982; Fluvià et al. 2001; Hara 2013; Pasto and Soler Domingo 2009; Román Márquez 2011; Rubio 2002; Ruiz and Guía 2004; Voltes-Dorta et al. 2014), as Local Government has to bear the additional costs of providing extraordinary public services as tourist destinations, without receiving compensatory financial contributions.

The problem of finance is exacerbated by budgetary dependence on governmental transfers, which are vulnerable to the economic cycle, budgetary cuts, and the cycle and political leanings of the government.

Setting up public-private DMOs offers a solution to the problem of finance, by diversifying the financial resources of tourist destinations, actively involving the private sector, and gaining access to resources that are generated by the organization itself (Izard et al. 2010).

It is, therefore, interesting to know whether, in the world's biggest and most successful tourist city-destinations, tourism is managed by means of a DMO and to analyze the legal, organizational, functional and financial structure of these organizations, in order to see whether they truly manage tourism in the destination, find out the weight of the public and private sectors, and ascertain whether these are freed from budgetary constraints, as well as analyze the origin of their resources in a more detailed way. It is also interesting to know the attitude of these DMOs towards public-private collaboration in the sphere of finance.

To this end, a questionnaire was sent to the DMOs of the world's top thirty-five tourist destinations, to be completed by the senior management figures from these organizations. The information obtained, complemented with an analysis of secondary sources, allows certain conclusions to be reached based on the results yielded by the analysis of this information.

2 Theoretical Framework

Managing tourism within a destination involves two main functions: firstly, it must seek to improve the social and economic wellbeing of the permanent residents of the destination, and secondly, it must be capable of offering a series of activities and experiences that meet the needs and expectations of tourists, without sacrificing the improved wellbeing of residents (Bornhorst et al. 2010). If this is achieved, the management of tourism in the destination can be considered a success.

For this reason, management must be based on understanding, collaboration and the coordination of the different actors to ensure good governance within the tourist destination. One of the tools required for good governance highlighted in the scientific literature (Bramwell and Sharman 1999; Cambrils 2016; Dredge 2006; Durán 2013; Hall 2000; Muñoz and Fuentes 2013; Paskaleva-Shapira 2001; Pechlaner and Tschurtschenthaler 2003; Pulido et al. 2013; Pulido-Fernández and Pulido-Fernández 2014; Ruiz 2010; Selin 2000; Teo and Lim 2003; UNWTO 2010) is Public-Private Collaboration (hereinafter PPC).

Currently, some of the world's leading tourist destinations manage tourism through a DMO (Barcelona, Amsterdam, London, Berlin, New York, Toronto, Miami, Los Angeles, etc.) (Muñoz and Fuentes 2013), considered the highest level of formalization within the sphere of public-private relations and the establishment of networks for the promotion of a tourist destination.

There are many different definitions regarding what a DMO is, seeking to facilitate understanding of their nature, functions, and activities. The UNWTO (2004) offers one definition, which is widely accepted among the scientific community and which establishes that a DMO is an organization responsible for the management and marketing of the destination, and which in general can operate at a national, regional and local level.

In fact, the scientific literature has defined a DMO as the actor in charge of the strategic planning, management and organization of a destination's resources (Pike 2004; Presenza et al. 2005), which must behave as a genuine governing body with guaranteed economic and financial self-sufficiency.

DMOs provide the appropriate mechanisms to establish interrelations between the actors responsible for making decisions within a destination, as well as the formulas through which they can collaborate with one another Presenza et al. (2005).

Hence, DMOs are agents that act as intermediaries between the external competitive environment and the internal environment of the destination. In the external competitive environment, the aim of the DMO is to compile knowledge and enhance the competitive position of the destination in the market. Within the internal environment, the aim is to promote and spread this knowledge and collaboration between the interested parties (Sheehan et al. 2016).

There are a great many DMOs all around the world, of different sizes, with different types of organizational structures that depend on local practices and the governmental systems of the destinations. What does define all DMOs is that they are set up in order to raise the status of the destination and make it more competitive (Getz et al. 1998). The majority of DMOs are characterized by the following features (Stange et al. 2011; Wray et al. 2010):

They are independent non-profit organizations.

They have a long-term vision of development for the destination.

They are membership-based entities, and their members are a combination of different stakeholders in the development of tourism within the destination.

They are normally governed by a management board or executive committee.

They have their own regulations and by-laws.

Their sources of finance are diverse in origin, both public and private.

There is a clear distribution of responsibility and adequate operational structures.

Decision-making is transparent and involves the different stakeholders.

Many of their services are free at the point of use.

They are independent of any influence certain groups may exert over them. They must also play an important role in the leadership and defence of the destination (Ritchie 1993; Bry and Gustke 2004).

The functions performed by DMOs have been analyzed by various authors (Bornhorst et al. 2010; Cosa 2010 Gartrell 1994; Morrison 2013; Sainaghi 2006), who have highlighted the following: leadership, coordination, cooperation, integration, promotion and development of the product, all carried out from the perspective of sustainability to achieve their mission of developing and enhancing the competitiveness of the destination.

The responsibilities of DMOs must include 'external destination marketing' (EDM) and 'internal destination marketing' (IDM) function (Presenza et al. 2005).

The EDM function includes all promotional activities aimed at increasing the volume of visitors to the destination. IDM activities encompass all other activities aimed at internal initiatives within the destination, not related with promotion and commercialization, but rather with developing and maintaining tourism in the destination.

Presenza et al. (2005) propose a descriptive model that encompasses these two dimensions, showing the global effort of the DMO in the sphere of management.

Greater effort in both dimensions will lead to a greater total effort on the part of the DMO to ensure integral destination management.

Based on this differentiation between external and internal functions, a more detailed and specific classification of the functions carried out by a DMO is given in Table 1.

In relation with the functions that turn DMOs into smart agencies, Nonaka (1991:96) argues: "a secure source of long-lasting competitive advantage is knowledge". Hence, those responsible for planning and managing tourist destinations must make use of the collective knowledge assets available within the destination and all the knowledge developed by the scientific community and the government to guarantee the viability and sustained success of the destination in the global market (Ruhanen 2008).

Following an in-depth bibliographic review, Bornhorst et al. (2010) stated that, when studying DMOs, the majority of the scientific literature tends to focus on issues relating with marketing and promotion over and above other issues.

The concept of Destination Marketing Organization (DMkO hereinafter) is commonly confused with that of Destination Management Organization (DMO). Indeed, many organisms, entities, and even actors use both terms indistinctly (Sheehan et al. 2007), when in reality they are only alluding to the promotional function of these entities, and hence are referring to DMkO.

In the past, the functions of a DMO did indeed primarily focus on activities related with marketing. However, in the present day, a growing academic current advocates that DMOs should include competencies that go beyond marketing, framed within destination management (Sheehan et al. 2016). Hence, the concept of DMO and DMkO are completely differentiated (although there are still some cases of confusion today), and within the functions listed for DMOs, DMkOs are only responsible for those related with the marketing and promotion of the destination, without performing functions related with the management of tourism within the destination.

It is true that destination marketing is one of the most important roles for a DMO (Arbogast et al. 2017), and its planning has high priority, but the functions of this organization go beyond that.

Table 1 in the previous section, which details the functions of a DMO, shows a clear differentiation between the functions of a DMkO, which is in charge of marketing and promotion, and those of a DMO, which must be cable of carrying out functions from all three categories.

However, some authors such as Pike and Page (2014) question the management profile of DMOs, arguing that very few have the mandate or resources to manage their destination effectively, and hence it is up to the precise legislative or political framework established to orient each DMO.

Table 1 Functions of a DMO

Management	Marketing and promotion	Smart agency
Coordination of tourism stakeholders Tourist service and care Management of tourism resources Monitoring the quality of visitor experiences. Development of the destination's human resources Assistance in finance and venture capital Management of crisis situations	Web marketing Publication and leaflets Familiarization tours Promotion campaigns Fairs Direct sales Direct mail-outs Cooperation programmes with the sector Conferences, events, festivals, advertising	Compilation of knowledge and resources internally Compilation of knowledge and resources externally Dissemination of information internally Dissemination of information externally

Source Authors' own based on Presenza (2006) and Sheehan et al. (2016)

Depending on the destination and the type of tourism policy developed, the management tourism within a destination can be carried out through a DMO, or by the government itself, leaving the promotion and marketing of the destination to a DMkO.

3 Scope of the Study and Questionnaire Methodology

In the document entitled Global Destination Cities Index, compiled by Hedrick-Wong and Choong (2017) for MasterCard, various rankings of the world's biggest tourist city destinations in 2016 are established, according to different parameters: number of overnight visitors, volume of tourist spending, year-on-year growth in tourism, etc. Finally, a list of the Top 100 city destinations was compiled, ranking the one hundred most visited cities in the world, according to the number of overnight visitors at each destination.

The research developed here focuses on the top thirty-five cities in that ranking (Table 2).

Table 2 Top 35 city destinations in the world and their management/marketing approach

Rank	City	Management/ marketing	Rank	City	Management/ marketing
1	Bangkok	Government	19	Shanghai	Government
2	London	PPC	20	Prague	Government
3	Paris	PPC	21	Los Angeles	PPC
4	Dubai	Government	22	Madrid	Government
5	New York	PPC	23	Munich	Government
6	Singapore	Government	24	Miami	PPC
7	Kuala Lumpur	Government	25	Dublin	Government
8	Istanbul	PPC	26	Berlin	PPC
9	Tokyo	PPC	27	Mumbai	Government
10	Seoul	Government	28	Riyadh	Government
11	Hong Kong	Government	29	Toronto	PPC
12	Barcelona	PPC	30	Chennai	Government
13	Amsterdam	PPC	31	Beijing	Government
14	Milan	Government	32	Lima	Government
15	Taipei	Government	33	San Francisco	PPC
16	Rome	Government	34	Vancouver	PPC
17	Osaka	PPC	35	Sydney	Government
18	Vienna	Government			

Note PPC = public-private collaboration
Source Authors' own based on Hedrick-Wong and Choong (2017)

At the top of the list is Bangkok, which in 2016 received 21.47 million visitors, who spent 14.84 million USD, and at the bottom is Sydney, ranked 35th, with a total of 3.75 million visitors, and tourist spending of 6.40 million dollars (Hedrick-Wong and Choong 2017).

Of these top thirty-five city destinations, this study focuses on analyzing those with a public-private DMO, in its different legal structures, responsible for managing or promoting the destination. Table 3 summarizes the destinations studied here, as well as the DMOs responsible for managing/marketing the destination.

For the purposes of this study, a questionnaire was created and sent out to these organizations.

The aim was to create a survey with a sufficiently clear structure and contents to facilitate understanding of the questions and which would provide a clear and reliable picture on the basis of the answers given, in accordance with the research aims established.

The questionnaire was drawn up on the basis of the bibliographic review conducted. The aim was to obtain the following information:

Legal and organizational structure of the entity.

Importance given to public-private collaboration for the competitiveness of the destination.

Competencies and functions of the entity.

Budget and budgetary structure of the entity in the year 2016.

Advantages and disadvantages of the different forms of destination management finance.

As shown in Table 4, the sample comprised 14 entities, 5 of which responded to the questionnaire (35.71%). The questionnaire was emailed in several stages, since

Table 3 Top city-destinations in the world with a public-private DMO

City	Entity
London	London and partners
Paris	The Paris Convention and Visitors Bureau
New York	New York and Company
Istanbul	The Istanbul Convention and Visitors Bureau
Tokyo	Tokyo Convention and Visitors Bureau
Barcelona	Barcelona Turisme
Amsterdam	Amsterdam Marketing
Osaka	Osaka Convention and Tourism Bureau
Los Angeles	Los Angeles Tourism and Convention Board
Miami	Greater Miami Convention and Visitors Bureau
Berlin	Visit Berlin
Toronto	Tourism Toronto
San Francisco	San Francisco Travel Association
Vancouver	Tourism Vancouver

Source Authors' own

it had to be sent out several times to the majority of respondents in order to motivate their participation.

The expected rate of participation was not achieved. In fact, of the fourteen entities to which the questionnaire was sent, 21.42% decided not to participate in the study, arguing that it would breach their data protection policy.

Hence, by studying the information and reports posted on their webpage, and through the analysis of secondary sources, we obtained as much information as possible about the other entities in order to achieve results that would provide the most accurate picture possible of all the entities.

During this process, the lack of transparency of the majority of these entities has been particularly striking. In general, they feel that finance data are private and should not be made available to the public, so these are concealed or only presented in a very brief summary. Hence it has not been possible to obtain any kind of financial data from five entities (35.7%).

Owing to this circumstance, the results of the opinion questions only include responses from the entities that completed the survey (35.71%). The other questions include data about these DMO, and for those that did not complete the questionnaire, the data required were obtained from their webpage and secondary sources (64.28%).

Finally, with 35.71% and 64.28% of the population considered, the responses were of sufficient quality and quantity, and also displayed high levels of homogeneity, with reliable and significant results.

The nineteen questions included on the questionnaire were designed to meet the information requirements established. To obtain the information required, different types of questions were used, which can be classified in accordance with two criteria (Fernández 2000): according to the response format and according to the information provided. According to the response format, the questionnaire included open-ended, closed, and mixed questions. Within the second category, dichotomous and multichotomous questions were included, with the latter offering single and multiple-choice options.

Different types of scales were also used to measure the study variables. Nominal non-metric scales were used to identify the categories or options with which the respondent's opinion could be identified, when analyzing qualitative variables

Table 4 Technical specifications of the questionnaire

Scope	Public-private entities responsible for managing/marketing the world's top 35 destinations
Sample size	14
Response rate	5 (35.71%)
Working dates	October–November 2017
Type of study	Structured questionnaire sent by email

Source Authors' own

without quantitative significance. Furthermore, a Likert-type scale was used to measure attitudes (scored correlatively from 1 to 5, according to the interest in the respondent's opinion), which allowed the respondent to score the different statements given.

4 Results and Discussion

This next section describes the results obtained in the survey carried out with the DMOs analyzed here, as well as in the analysis of secondary sources.

Before describing the results obtained in the questionnaire, it is important to highlight that, as shown in Table 2, of the top 35 city-destinations in the world, only fourteen have public-private DMOs (Fig. 1).

The first question sought the opinion of the respondents about the state of the matter: the importance of public-private management of a tourist destination in terms of its competitiveness. In general, the respondents feel it is important, giving it a score of 4.2 out of 5, with a standard deviation (hereinafter SD) of 0.8.

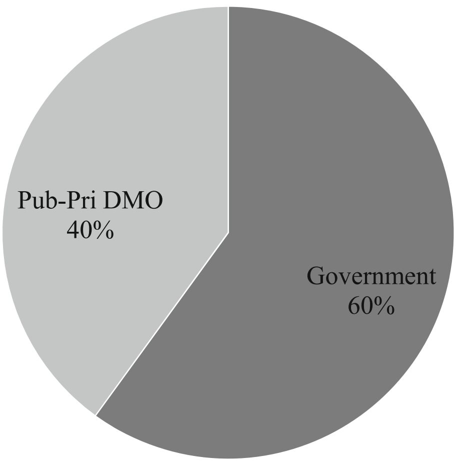
The next block of questions asked about their legal-organizational and functional structure.

All, with the exception of one, which takes the form of a mixed consortium, are non-profit organizations. 100% of them have a classic linear organizational structure, based on the principle of hierarchy and on the maintenance of unity of command.

These are public-private entities, in which the public members represent 2% and the private members 98% (Fig. 2).

The next step was to ascertain the functions they perform in order to determine whether they are indeed DMOs, or whether they do not deal with tourism

Fig. 1 Type of tourism management/marketing entity *Source* Authors' own



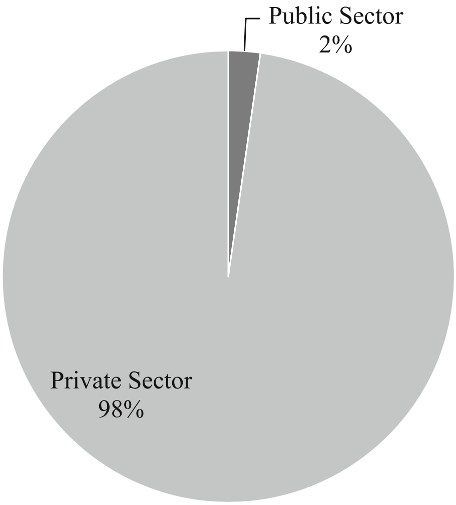


Fig. 2 Membership of the DMOs *Source* Authors' own

management, but instead are limited to promoting and marketing the destination. The functions and competencies the respondents were asked to indicate are given in the previous chapter, when studying the functions of DMOs:

1. Coordination of tourism stakeholders.
2. Tourist service/care.
3. Management of tourist resources.
4. Monitoring of visitor experience quality.
5. Development of the destination's human resources.
6. Assistance with finance and venture capital.
7. Web marketing.
8. Publication and leaflets.
9. Familiarization tours.
10. Promotion campaigns.
11. Fairs.
12. Direct sales.
13. Direct mail-outs.
14. Sector cooperation programmes.
15. Conferences, events, festivals, advertising.
16. Crisis situation management.
17. Compilation of knowledge and resources internally.
18. Compilation of knowledge and resources externally.
19. Dissemination of information internally.
20. Dissemination of information externally.

The first six are management functions. Numbers 7 to 16 are competencies related with the promotion of the destination. And, finally, functions related with

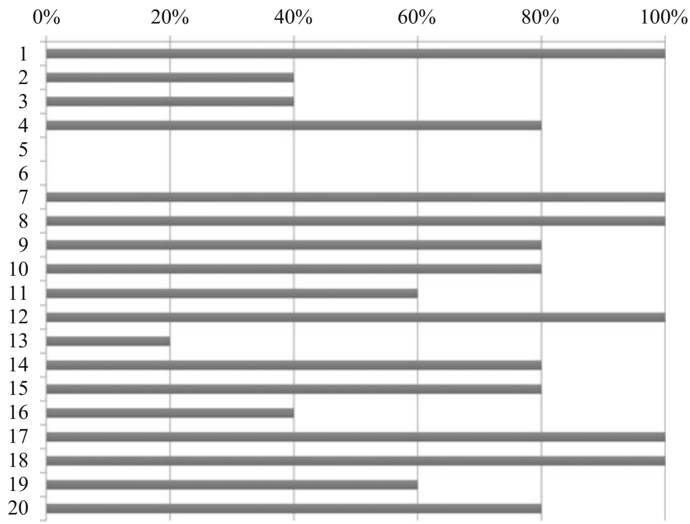


Fig. 3 Functions performed by the DMOs *Source* Authors' own

the compilation and dissemination of information internally and externally indicate whether the entities are acting as smart agencies.

Figure 3 summarizes the functions performed by the DMOs that responded to the questionnaire.

Marketing functions form the basis of these organizations, and management functions are secondary, although they do assume their role in the coordination of stakeholders for the development of tourism in the destination, and, partly, the monitoring of customer satisfaction. Of particular note is the fact that the majority have competencies in the area of knowledge management and particularly the compilation of knowledge.

With regard to their financial structure (Fig. 4), public finance (48.70%) forms the basis of the DMO budget, which is 26.4 million euros on average. The rest of their finance is provided in almost equal parts by private sources (28.15%) and self-generated resources (23.15%).

Analyzing each DMO individually, three behaviours can be identified in this regard:

When public finance accounts for more than 80% of the total. A minority of them are in this situation. Just two of the DMOs analyzed.

Another minority block (22%) is made up of entities with less than 10% of their budget provided by public funds, meaning that they have a fully autonomous budget.

Finally, the group that encompasses the majority of the DMOs (55.5%) is characterized by a certain proportionality in terms of finance, with public resources accounting for between 40% and 65% of the total. This proportion continues to represent a certain dependence on public taxation.

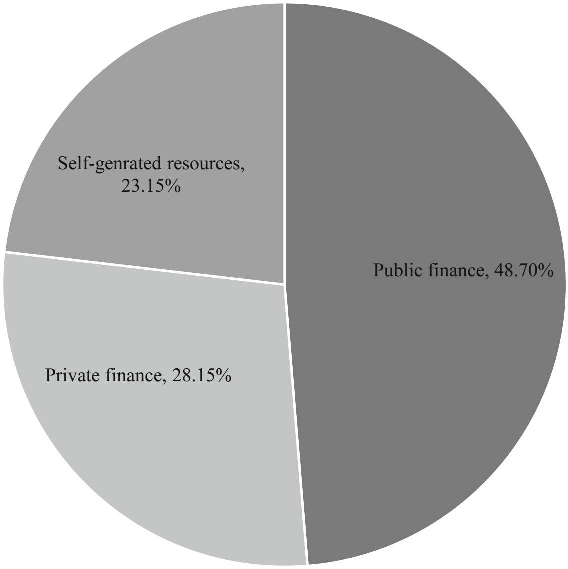


Fig. 4 Financial structure of the DMOs *Source* Authors' own

Figure 5 shows the distribution of public finance. The contributions made by the governments of the city, country and region account for close to 70% of the public finance, with the city government making the largest contribution, representing 27% of the total finance. With regard to taxes on tourism, it is particularly salient that the tax on accommodation is practically the only tax that finances these entities, representing 17.5% of public funds.

Table 5 shows the degree of agreement or disagreement expressed by the entities surveyed regarding the advantages and drawbacks associated by the scientific

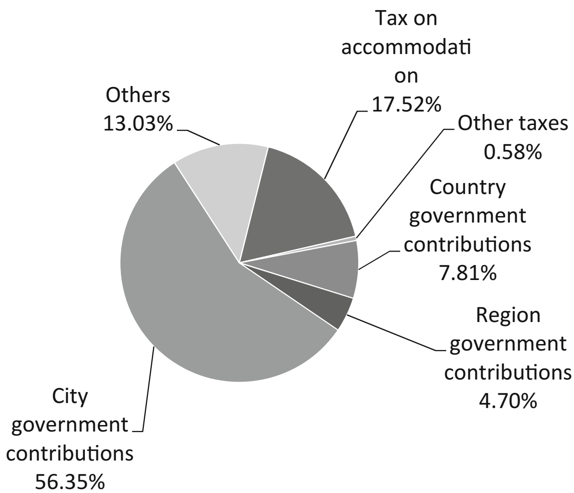


Fig. 5 Origin of DMO public finance *Source* Authors' own

Table 5 Advantages and drawbacks of the public finance model of DMOs (1 = completely disagree; 5 = completely agree)

	Mean	SD
Facilitates the involvement of the public sector in the development of tourism policy in your environment	2.8	0.70
Favours transparency in terms of the destination of funds, since they are subject to rules of public accounting and transparency	2.6	0.80
Favours the equality of all companies interested in participating in tourism management	2.4	0.50
Assures the stability of the DMO in the mid-long term	2.6	1.40
Reduces the DMO's speed of response to the needs of the global market, since regulations and public bureaucracy are brought into play	2.4	1.40
The inherent characteristics of public accounting do not help the private sector to visualize the assignation of funds to measurable targets	3.2	1.00
The allocation of public funds to a specific economic sector can generate mistrust in the population	2.2	1.20
The private sector understands public contributions as an obligation derived from the payment of taxes, which does not help the public and private sectors to work in the same direction	2.8	1.20
It fosters dependence on the public sector	3.0	1.10
Gives public powers greater influence in the decisions made in DMOs	3.4	1.60
Public finance should be the main source of finance for DMOs	3	1.80
Public finance should be complementary in the financial structure of DMOs	2.8	1.00
Tourism taxes foster quality sustainable tourism	2.8	0.70
Tourism taxes do not benefit tourism in your city	2.4	1.20

Source Authors' own

literature with public finance. They only slightly agree with the notion that public finance means that public powers have a greater influence in the decisions made and that the characteristics of the accounting system used do not allow the private sector to visualize the allocation of funds to measurable targets.

The entities surveyed add that the tax on accommodation and the related processes of governance are often subject to public interference and vulnerability. However, in the main urban destinations with a substantial volume of visitors from outside the city, this system of taxation is efficient and represents a form of taxation paid by non-residents.

All of the DMOs surveyed, with the exception of one, consider that the tax on accommodation is the most suitable formula for the sustainable development of tourism in their city. One of them argues that taxes should be established that would be payable by hotel businesses directly, based on the revenues generated by renting out rooms. Hence, the customer is not the ultimate taxpayer but rather the hotel is, although the hotel owner might well pass on this tax burden in the price of the room.

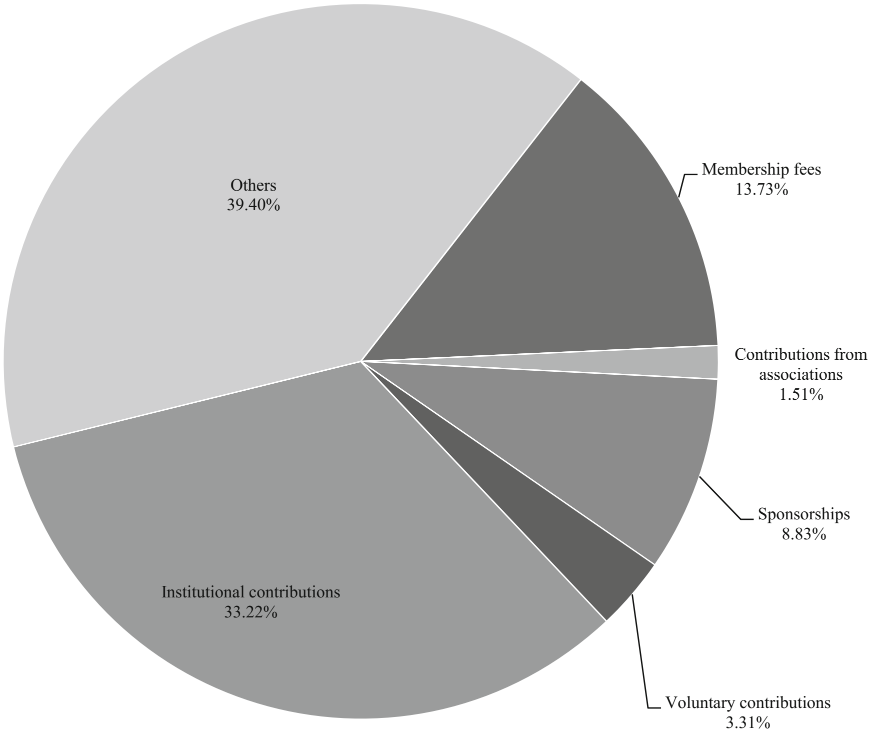


Fig. 6 Origin of DMO private finance *Source* Authors' own

Private finance is structured as shown in Fig. 6. The 'others' section has the greatest weight, owing to the inclusion of revenues from specific projects in two entities. The rest of the finance comes mainly from businesses in the sector, through various instruments: institutional contributions (33.22%), membership fees (10.93%), sponsorships (7.03%), voluntary contributions (2.64%) and contributions from associations (1.2%), which have a negligible participation.

As for the advantages and drawbacks of private finance (Table 6), the entities surveyed estimate that private finance reduces dependency on public funds, increases their level of professionalisation, and that securing this funding entails implicit effort. They also feel that it favours coordination with the private sector.

They do not feel that it decreases the weighting of the public sector in decision-making or that it gives rise to greater financial discontinuity.

Figure 7 shows the distribution of resources generated by the DMOs themselves. Revenues from the sales of products and the provision of tourist services are the most important resources in this category (58.09%), followed by those generated by booking management (21.92%) and advertising (7.71%).

Regarding the advantages and drawbacks of DMO finance through resources generated by the entity itself, Table 7 shows the average results for the opinions

Table 6 Advantages and drawbacks of DMO private finance (1 = completely disagree; 5 = completely agree)

	Mean	SD
Encourages DMOs to control their management and efficacy in the achievement of targets, so that the private sector is willing to participate	3.6	1.40
Allows for effective integration between the public and private sectors	3.4	0.80
Encourages the public and private sectors to work in the same direction	3.4	1.20
Reduces the influence of politics on DMO management	3.6	1.50
Reduces the influence of politics on destination management	2.8	1.30
Reduces the DMO's dependence on public funds	4.4	0.50
Fosters coordination between different stakeholders	3.8	0.70
Increases the professionalisation of the DMO	4.0	1.10
There is a risk that strategies will focus on the short term, since the private sector demands immediate results	3.2	0.70
Greater risk of discontinuity in finance	2.8	0.70
Securing finance requires a greater effort on the part of the DMO	3.8	1.00
Sectors of the population outside tourist activity might view private finance as interference from private interests in the city's politics	3.6	0.50
Requires control mechanisms to prevent 'a few' from controlling the DMO and the management of tourism within the destination	3.4	1.00
Private finance should be the main source of finance for DMOs	3.2	1.00
Private finance should be complementary in the financial structure of DMOs	3.6	1.00

Source Authors' own

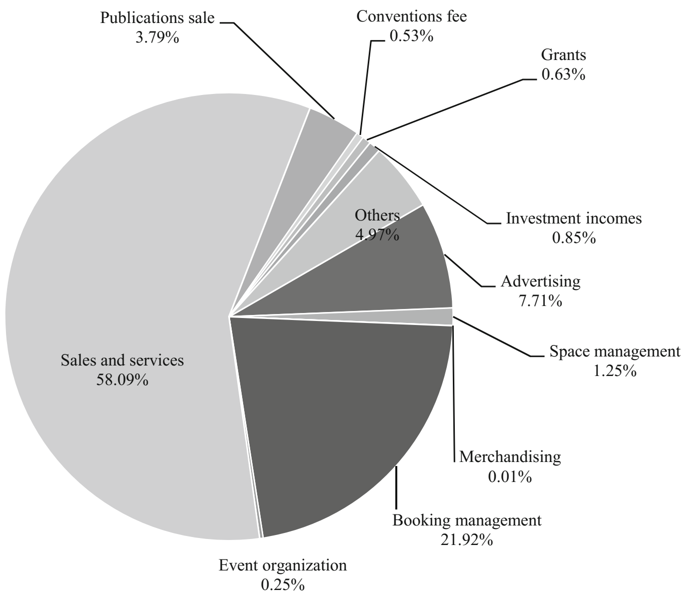


Fig. 7 Origin of self-resources generated by DMOs *Source* Authors' own

Table 7 Advantages and drawbacks of the self-generated resources of tourist management/marketing organizations (1 = completely disagree; 5 = completely agree)

	Mean	SD
Securing private finance is understood as a success factor in management, which leads to greater involvement of the public and private sectors	3.2	0.70
Securing private finance requires a commercial orientation	3.4	0.80
It provides important and immediate "feedback" from users	3.6	0.50
It leads the DMO to move away from less dynamic structures, which are characteristic of bureaucratic structures	2.8	0.40
The DMO becomes a product sales centre and tourist service provider, giving it stability	3.4	0.80
It forces the DMO to develop a business strategy, thus improving its competitiveness	3.4	0.80
Reduces the DMO's dependence on public funds	3.6	0.80
Danger of focusing on short-term success and sidelining the main mid-to-long term tourist management targets	2.6	0.50
Some activities might be seen by business owners as direct and even unfair competition (hotel bookings, sale of products, activity bookings, etc.)	2.6	1.00
Mechanisms of consensus must be sought with business owners in order to avoid conflicts of competition	3.4	0.50
The focus is placed on securing more revenues and greater profits, sidelining the true aims of the DMO	3.0	0.90
Self-generated resources should be the main source of finance for DMOs	2.8	1.30
Self-generated resources should be complementary in the financial structure of DMOs	2.6	0.50

Source Authors' own

given by the entities in the survey, which, once again, do not display a very high level of agreement with any statement.

The entities agree to some extent that self-generated resources require a commercial orientation, which turns them into a product sales centre and service provider and requires a business strategy. It also generates 'feedback' to be taken into account, and reduces dependency on the public sector. These resources offer a number of advantages, including those derived from their commercial nature, reducing the influence of the public sector. The DMOs surveyed feel that these resources should not be complementary in nature.

5 Conclusions

PPC in the management of tourism is considered to be one of the approaches that best adapts to good governance, and in terms of the different figures through which this collaboration could materialize, mixed DMOs offer a higher level of formalization within the sphere of public-private relations.

It should be noted that the management of tourism through mixed DMOs is not widespread in all the most visited cities in the world. These are well-established destinations, and governmental management is highly recommendable during the initial stages of tourism development or for destinations with little private critical mass, for which tourism is not a strategic sector, or where private sector networks are very weak.

In destinations that do have a DMO, the most widespread legal form is a non-profit entity, which is understood to be the most efficient, flexible and rapid structure for management, organization and contracts, particularly when providing a service in return for revenue. It is also considered ideal for destinations with a strong, structured and mature business sector, and established tourism. Only one DMO, of those that responded to the questionnaire, takes the form of a mixed consortium with its own legal structure and status, as an entity regulated by public law but with the capacity to act independently and to fix public prices. Consortiums are used when tourism is a strategic sector, and the maximum union of public-private synergies is sought.

Their organizational structures are anchored in a classic linear model based on the principle of hierarchy and the maintenance of unity of command. To favour the effectiveness and efficiency of these entities, they must evolve towards organizational structures that are more geared towards the market, such as the matrix management structure.

The membership structure of DMOs leaves no doubt regarding the interest of the private sector in participating in the promotion and management of the destination. Private participation accounts for 98% of the total.

In terms of functions, the DMOs of the world's leading tourist destinations focus the majority of their efforts on the promotion and marketing of the destinations, which becomes their reason for being, as reflected in their by-laws, thus sidelining the function of management, with the exception of the coordination of stakeholders, a function that they understand to be of primary importance for the development of tourism within the destination.

As for the management of knowledge, DMOs need to make further progress in the dissemination of information, because they do dedicate time and effort to research, and the search and analysis of data.

Financially, the budgets of these organizations are characterized by public-private proportionality, which means that they cannot be considered financially independent, since public funds account for over half of their resources. Hence, they are still dependent on the Government. This is due to the fact that, if each DMO is analyzed individually, more are dependent on public finance, mainly direct governmental transfers, and fewer can be considered financially autonomous.

The problem of finance faced by tourist destinations is also reflected in this analysis. According to the data analyzed, the city government provides more finance to DMOs than the corresponding regional/state government, whose contribution is a quarter of the amount supplied through the city's budget.

Taxes on accommodation are fully established and assumed by these DMOs, although they some raise the notion of establishing a tax on hotel revenues.

It is fundamental that the magnitude of private finance and self-generated resources in the organization's global budget is proportional to the importance of the private sector in the destination's tourist economy. The interest of the private sector in participating in tourism management has become clear when analyzing the membership structure of these DMOs. However, although there is joint responsibility with regard to finance, the public sector continues to hold greater weight, which usually translates into greater influence.

The scientific literature has stated that self-generated resources should account for the highest proportion, in order to guarantee the organization's autonomy (Arbogast et al. 2017). However, for the DMOs analyzed, these resources are the third source of finance, representing less than one quarter of the total Therefore, there is still a great deal of work to be done in this regard.

A more detailed analysis of the financial structure of DMOs shows that 70% of the total finance is divided between: contributions from the city government 27.5%), sale of tourist products and services (15%), institutional contributions (non public) (9.5), tax on accommodation (8.5%), booking management (6%) and membership fees (4%). In spite of the importance of Chambers of Commerce, and business associations and federations, their financial participation is almost negligible.

Regarding the advantages and drawbacks of the different forms of finance, the DMOs do not seem to share the opinion of the specialized literature, as reflected in Tables 5,6 and 7. A series of positive and negative statements related with public finance, private finance and self-generated resources were posited, and on average, the DMOs scored their level of agreement (out of 5) 2.7, 3.5 and 3.1, respectively. The advantages and drawbacks of private finance revealed the highest level of agreement, but even so, the average score is closer to the neutral position.

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Chapter 38
The Impact of Corporate Culture in the Performance of the Front Desk Employees—The Case of Five Star Hotels in Greece

Dimitrios Belias, Christos Mantas and Dimitrios Tsiotas

Abstract Organizational culture and business philosophy have been shown to affect the performance of an organization. It is imperative for executives to know the organizational culture of the business in which they work to develop the corresponding strategic goals that will improve the performance of the hotel business and give it a competitive advantage over its rivals. (Belias et al. 2016b, c). In order to achieve an excellent customer service it is necessary to know the characteristics of the customer of the hotel business. Services that do not meet customer expectations will prove to be unsatisfactory, so the customer can look for these services in other competing businesses. This is very important in the case of five star hotels in Greece. Of course, as it is revealed on this paper, there is still a need for further research on this topic.

Keywords Culture · Performance · Tourism · Greece · Five star hotels

JEL Classification Z32 · L83 · M10

1 Introduction

Hotel business develops in an environment that is determined by the laws of supply and demand and maintains a two-way relationship with the market and industry. In such an environment, the strength of workers seems to be able to face challenges

D. Belias (✉)
Department of Business Administration, Technological Educational Institute of Thessaly, Larissa, Greece
e-mail: dbelias@uth.gr

C. Mantas
Department, Centre for Labour Market Studies, University of Leicester, Leicester, UK

D. Tsiotas
Mathematics, Polytechnic School, University of Thessaly, Volos, Greece

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such as increased competition, pressure to reduce costs, maximum responsiveness to customer requirements and preferences. Although the company has tried to offer excellent service to its customers, by implementing and maintaining procedures to ensure service by the frontline employees and to promote a customer-centered approach, this has not been achieved to its fullest. One major reason is the lack of management orientation towards its employees and the need for a credible and professional behavior of its employees. Hotel businesses wishing to offer high quality services to their customers must primarily develop employee values, priorities, attitudes, abilities and behaviors so as to be consistent and in harmony with the hotel's business philosophy.

According to the above, the hotel management should focus on productivity, organizational effectiveness, efficiency, service quality and customer focus in order to build and maintain a loyal customer base. To achieve this, one of the aspects that needs to be changed is the attitude of the staff, which should be directed towards providing pleasant, efficient and effective customer-focused care. We need a customer service program that will help provide excellent service, but based on a pre-existing, clear and fundamental organizational culture According to Balthazard et al. (2006, p. 710), a dysfunctional organizational structure is responsible for low efficiency, efficiency and overall performance. Therefore, within a business, the internal forces that cause a dysfunctional organization must be identified and this concerns the organizational culture. Organizational culture is what keeps a business united, supports organizational development and is a critical success factor in achieving its strategic goals (Chapman and Jehn 1994).

Modern businesses know that they will survive when all satisfied customers return and the greater the clientele, the greater the profit. This requires detailed knowledge for customers. Measuring service quality is a key factor in the survival and growth of an organization. The provision of high quality services is essential as it can be a powerful comparative advantage. Customer service quality assessment is important to improve business performance as well as to re-market strategy. Knowing that customers will convey their perceptions of experience and their experience of the quality of the services they have received, we realize that this will directly affect the competitive advantage of the business. A key concern is the gap that may exist between customer perception of service quality and the corresponding perception of employees about the service they offer. Employees must be trained to objectively understand the satisfaction of the customer or not. This will lead to a better match between what customers perceive as excellent service but also on what employees perceive as an excellent service.

An important factor that will determine the front-office employees performance, which is defined so to deliver high quality of services, is the case of culture. This is more important when we refer on five star hotels since the customers are more demanding on those hotels. Having in mind that tourism is very important in Greece and the lack of such a research in Greece has led on this paper. The aims aim to make a literature review based upon the existing papers and research. The data was retrieved from scholar.google and other sources such as EBSCO and emerald. The aim is to produce a paper which will investigate the current literature and it will pave the way for future research.

2 Literature Review

2.1 Organizational Culture

Organizational culture, according to Wright (1986), consists of the attitudes, values, beliefs and expectations of all those working in a business or organization, while Pascale (1984) adds that common values and beliefs guide the workers of a business towards the same direction and objectives. Field and Davies (1984) report respectively that organizational culture is essentially a system of behaviors and principles that unite the members of an organization. In any case, a business needs a structured business philosophy and an organizational profile.

According to Fletcher and Jones (1992, p. 30), the organizational culture refers to the values and beliefs of the entire workforce as they are evident from the behavior of the workers. For an effective organizational change, it is necessary to harmonize the organizational culture with the organizational needs and therefore it is necessary to measure the organizational culture.

Van Donk and Saunders (1993) studied the organizational culture in an effort to improve quality management and its applications. By understanding the organizational culture of a business, the concept is clarified quality and how it relates to organizational culture. This study has demonstrated that through the measurement of organizational culture a reliable set of valuable information on improving the quality of management can be collected and that some cultural dimensions between human resources can hinder others while others can support quality management. The importance of this study is mentioned here as customer service is directly related to the quality of the services provided.

Denison and Mishra (1995) focused on special cultural traits that may be useful tools for predicting organizational efficiency and effectiveness. Their study, which explored the relationship between organizational culture and effectiveness, has demonstrated the existence of four cultural characteristics, namely participation, consistency, adaptability and goal. The above parameters are positively linked to employee performance, return on assets and increased sales.

Brown (1992) highlights ways in which the organizational culture will could be used to achieve organizational and functional objectives. Leadership, organizational planning and development programs should be flexible and based on organizational culture. He adds that there are exemplary leaders, aware of business philosophy and of the organizational culture, who possess the know-how to shape and refine their human resources. Successful leadership is related to managing and dealing with people, requiring empathic skills, social awareness, and cultural awareness. Organizational culture can be measured through four key parameters:

- The company's basic assumptions about motivation, adaptation, co-operation, performance, respect, goal achievement, evaluation,
- Current practices of the company, regarding performance control systems, quality of work, acquisition of knowledge through work, cooperation between departments, budget.
- Current communication channels and specifications on relations between employees, communication empowerment or separation between departments, the accuracy of message transmission, methods that help improve communication, exchange of ideas.
- The possible problems, irregularities, contradictions or exceptions that exist generally in the company, in specific departments, in its organizational policy, in the relationship between the vision of the company and its practical application.

2.2 Introduction to HRM

Wright (1986) states that employee satisfaction audit process should begin by identifying the factors that characterize an ideal working environment and compare this with the current work environment. An ideal workspace has the following features:

- Unified business philosophy and positive spirit inspired by management,
- Cultivation of internal guidance systems,
- initiation of employees in the philosophy of the enterprise,
- Regular feedback of positive information,
- substantial communication,
- encouragement for internal noble competition,
- margin for mistakes,
- Cultivation of roles, models, customs, idols among workers.

He adds that work makes sense through emphasis and orientation for care among people and through sound human resource management and organizational loyalty systems instead of through sterile command mechanisms. Katsikea et al. (2010) investigate the consequences of the organizational structure and the characteristics of the job in the job satisfaction of sales managers. One of the goals is to find job satisfaction of sales managers through multiple parameters of their work environment, including overall employment, colleagues, supervision, company policy, organizational support and customers. A sales manager who is satisfied with these dimensions is more likely to show a positive psychological situation to better perform within the business. In addition, professional satisfaction can also reflect the satisfaction of the needs, desires and goals of sales managers at staff level (Aspridis 2004; Aspridis 2007; Aspridis and Kyriakou 2012).

Our researchers suggest that people's perceptions of sales about the characteristics of their work (autonomy, diversity, feedback) are also important factors determining job satisfaction. Therefore, it is important to show that the characteristics of the work are useful indicators for clarifying the fluctuations of job satisfaction, since they are primarily approached in the light of conflict and ambiguity. With different wording, it is argued that job features are directly related to job satisfaction, even when the impact of conflict and role ambiguity is taken into account. There are also indications in the literature that the attitudes and behaviors of sales managers are influenced by work experience and gender. Thus, these two variables should be taken into account.

Findings show that job satisfaction has a significantly positive relationship with work loyalty. Although the causal direction between these structures is controversial, it appears that the sales representatives who feel more satisfied with their work feel more committed to the business. Job satisfaction is a reaction closely related to the outcome of the job, while the organizational commitment concerns the entire business. As a result, job satisfaction strengthens and strengthens work loyalty and cohesion. In the same very interesting research, scholars argue that a constructive approach to enhancing the understanding of the factors influencing the sales, performance, performance and performance of sales people would be to exploit the concepts and theories that have been established in more developed research disciplines. However, the external validity of well-known theories cannot be taken for granted, but should also be confirmed empirically through reproduction studies in different contexts.

According to Katsikea et al. (2010), which refer to Agarwal & Ramaswami, the conceptual content of organizational loyalty can be defined as the emotional commitment that represents the strong desire of the worker to remain member of that organization, while being given the opportunity to change work if he so desires. Alternatively, the definition of Morrow is also mentioned (cited from Katsike et al. 2010) on organizational devotion, which can be defined as the degree to which a person has a strong belief in the goals of the organization, is willing to make a significant effort to the benefit of the business, and has a strong desire to maintain its position. All organizations would like their employees to feel such a strong loyalty as it leads to lower turnover and improved performance. Job loyalty is particularly desirable in the case of first-line representatives as their duties and the responsibilities of these staff are often complicated, difficult and demanding.

The same researchers report that the relationship between work satisfaction and work commitment has been extensively studied to provide a wealth of bibliographic sources for sales management. Empirical findings support a strong positive relationship between work satisfaction and work loyalty. However, there is a disagreement among researchers about whether work satisfaction is earlier or a consequence of work commitment (Belias et al. 2016a). Most studies—and especially the most recent ones starting in the late 1990s—claim that job satisfaction is earlier. Our scholars are based on an analysis by Brown and Peterson (1993), which shows that the primary direction of causal consistency starts from work satisfaction to work loyalty. Therefore, they support a structural model that assumes that higher levels of work satisfaction from work lead to greater work loyalty.

Siguaw et al. (1994) find that the organizational environment an enterprise supported by the implementation of activities; and market-oriented behaviors, distracts from the representatives first-line feelings of pride and reward for their contribution. Yoon et al. (2001, p. 500) state that their behavior customer service is vital to the provision of services services and in the light of internal marketing, these businesses will they have to take care of the workers so that employees can take care of the customers. In addition, the above researchers looked at two internal marketing parameters, particularly important for success implementing a program of excellence and, in particular, the climate prevailing in the provision of services and the level of support of each group of employees from the administration. It was finally found that the positive atmosphere and the support workers receive from their management have a positive impact on both job performance and employment satisfaction. The above in turn leads to positive behavior toward the customers (Trivellas et al. 2015; Vasiliadis et al. 2015).

Regarding incitement, Rigopoulou et al. (2011), focus on a study of first - line workers whose system of pay is determined by the overall organizational policy and mainly consists of a fixed monthly salary. Therefore, they give special emphasis on internal falsification. Referring to the definition of Churchill (1985) they argue that the motivation is an important and decisive factor performance. They add that the bibliography distinguishes the motives into inherent and exogenous. The same scholars refer to the definition of Brown and Peterson (1994) according to which inherent is considered the motive for which someone is involved in an activity for his own personal reasons, the pleasure or the value it feels to offer. The people who motivated endogenously devote more effort to a particular one work in order to export inherent attractive benefits such as pride, sense of accomplishment, satisfaction and enjoyment. Referring to the definition of Ingram (1989), accept as an exogenous motivation the value that a person considers, that they have the results of an action and their evaluation by others during the implementation of the action. Exogenous incitement concerns people who motivated by the reward others provide, such as pay and official recognition. Rigopoulou et al. (2011) continue, arguing that despite strong theoretical support for a positive relationship between an employee's level of motivation and work performance, empirical findings do not fully support something similar. With the sole exception of sales people in the industrial sectors, the available data on the role of incentives in influencing the behavior and performance of front-line workers is very limited. Ultimately, it is very likely that the incentive concept relates to a combined function of both endogenous and exogenous incentives, as workers seek both inherent as well as exogenous rewards. However, scholars emphasize the argument of Cravens, Ingram, laforge and Young (cited from Rigopoulou et al. 2011) that internal motivation is of particular importance when an administrative system is based on a fixed salary and when various conditions prevent extraordinary rewards. They add that, according to Oliver and Anderson (cited from Rigopoulou et al. 2011), the 'luxury' of financial security encourages workers to pursue inherent goals.

Previous surveys show that there are control systems that act as effective management mechanisms to boost employee motivation. Conversely, confusion or blurring of a role can negatively affect internal confusion. Based on pre-existing bibliography, the study by Rigopoulou et al. (2011) suggests that role ambiguity has a significant, negative effect on the internal illusion of workers. Applying an appropriate information control system reduces role ambiguity, thus promoting higher incitement to higher levels. In turn, internal stimulation enhances the job satisfaction and performance of front-line workers.

2.3 Recognizing the Employee Participation in the Efforts to Improve Hotel Performance

Terzidis and Tzortzakis (2004) report that the company has to express its interest in the ideas of its human resources and willingly reward any effort in this direction. Personnel management can develop actions of suggestions, rewards, and other incentives, addressing the challenge of innovative ideas in this area while enhancing human resources.

Roupas and Laloumi (1998) report that the empowerment of a group of employees can take place through their incitement to take responsibility and initiatives in their working environment. The term incitement could be explained as a psychological irritation that mobilizes certain forces to induce the individual to be actively directed toward a given goal. This concerns the activation of all employees' capabilities with the aim of maximizing their productivity and thus improving the tourist product provided to the guest. In practice, incentives are divided into financial, social or labor-based incentives. However, the various means and modes of incitement depend on the economic, social, internal or external needs and desires of the workers. Most importantly, it is to identify these needs within the various sections of the tourist business. In order for this to happen, account should be taken of:

- the working conditions in each part of the business
- the degree of performance required by each group's team
- the position of each employee in the hierarchical pyramid
- the temperament of each employee.

Despite all the scientific opinions and theories that can lead to an effective diagnosis of the needs of human resources, their identification remains a difficult task. Thus, at a practical level, proper motivation depends on the skills of a manager and the techniques he/she develops to observe and evaluate each employee. It is worth noting that a successful incitement method can temporarily lead to the desired result of productivity and optimization of the finished product, but it will only be effective if it ensures the continuity of the good effort of the employees, the appreciable reduction of complaints and the timely and effective treatment of the other discontents. Since empowerment is successful, both the employee and the whole group feel more capable of coping with the difficult and demanding conditions of their work, but also have a willingness to self-improve their services and become self-governed.

Special emphasis on the concept of empowering human capital is given to the tourism industry which offers services and hospitality so that first-line workers need the necessary jurisdiction to respond directly to the particular needs and ever-increasing demands of the modern consumer. According to Klidas (2001, p. 34), the empowerment determines the transfer of power and decision-making responsibility to first-line officers to control and increase quality of benefits and customer satisfaction during the provision of services. Klidas (2001) states that despite the development of business internationalization, the vast majority published literature on empowering maintains it. The Anglo-Saxon model and only sporadically has examined the implications of applying the concept in an international and multicultural context. Proponents of empowerment suggest radical changes in the form of organization (e.g. hierarchical structure) and administrative style, making arbitrary allegations that officials will unintentionally embrace this empowerment. However, studies have shown that the cultural context of each country plays a determining factor in the effectiveness of staff empowerment methods.

The validity of the above-mentioned estimates of empowerment was examined through a study carried out between employees and directors of 16 luxury hotels of a single well-known American multinational company. The choice of a single business was advisable in order to create functionally equivalent samples with consistent common features such as business philosophy and organizational culture. The study was conducted in seven European countries (England, Sweden, the Netherlands, Italy, Greece, Portugal and Belgium). The data were collected using qualitative and quantitative methods. Research has approached employees 'and managers' perceptions of management practices (e.g. training, remuneration, information and communication) and administrative style. The survey also measured the behavior of employees during the provision of services.

In conclusion, qualitative and quantitative data revealed a clear difference in the process of empowerment between hotels in North and South Europe. Staff survey data revealed that North Hotel employees want and manage margins efficiently along with their job role and take initiatives in service provision. Business executives in the North generally reported that first-line workers in their hotels consistently participate in the wide range of jurisdictions they are given and do not immediately resort to administrative assistance in case of unforeseen situations at work. Conversely, South Managers generally reported that employees are not easily responding to demands outside the narrow limits of their role, and usually seek administrative intervention to deal with unforeseen situations. Particularly clear was the divergence between the North and the South in terms of offering financial concessions to customers. While in the North the directors generally stated that officials often take initiatives for financial concessions even without first consulting with the competent boss, in the South the directors were in most cases very clear that this does not concern the responsibilities of officials who in such circumstances seek to involve a member.

In addition, research has shown that employees in the South perceive that they have a lower degree of authority to work independently in their work vis-à-vis their colleagues in the North. This is supported by the information provided by the directors themselves about the limited extent to which they authorize first-line officials.

In addition to this, staff survey data showed that employees in the South perceive that they have less training to respond adequately to unforeseen or particularly demanding circumstances against of employees in the North. The clear differences between North and South hotel management practices have also been identified in communications. Both qualitative and quantitative data revealed a discrepancy between the North and the South in relation to the opening of communication and the distribution of information. Employees in the South realize that communication in their working environment is less open and that the administration shares less information with employees than administrations in the North. Directors in the North have set out a series of formal processes that specifically facilitate upward communication and a variety of tools for the timely and valid transmission of information, including new technologies and the Internet. By contrast, most directors in the south did not want to refer to its official media upward and expressed a general preference for an informal communication climate. Occasionally, they even expressed their unwillingness to pass sensitive information to lower-level officials and obviously recognized the absence of official channels of information and communication.

Finally, there is a divergence between North and South and rewards and performance issues. Qualitative data reveals a stronger incentive initiative in the North and greater emphasis in the South on equal compensation for officials of the same rank, position and seniority. According to the directors of the South, it is the legislative framework that imposes equal pay. However, interestingly, this discrepancy was not revealed by the survey of employees, which shows that the rewards of first-class employees in hospitality are not primarily based on their performance.

3 Methodology

The methodology used in the present paper is the critical review of the literature.

The sources of relevant literature investigation derived from popular online bibliographic databases, such as Science Direct, Emerald, EBSCO host and scientific search engines such as Google Scholar and Scirus. General search engines such as Google have also been examined.

The types of bibliographic sources included in the research are articles published on scientific journals, books, conference proceedings, company papers and studies, white papers, online sites and online journals. The selection criteria of these literature sources were based on the relevance to the topic of the paper and this research is not exhaustive.

4 Discussion

According to Singh (2000, p. 15), first-line workers, especially in service organizations, are quite paradoxical. Although the importance of the work they produce for a good organizational outcome is indisputable and commonly accepted by executives and researchers, Singh says it is worrying to support evidence from researchers from Hartline and Ferrell (1993) that first-line representatives poorly paid, poorly trained, working long hours and having anxiety. It complements that little seems to have changed from the analysis of Brown (1992) which described the work of front line representatives as a "triangular struggle" in which the customer (who requires attention and quality of service and the business efficiency and productivity) are the two extremes while first-line workers are trapped in the middle. This apparent tension for the management and customer satisfaction as well as the pursuit of productivity and quality of objectives is emerging as a plentiful issue behind the study of front line representatives on the limitations of modern literature. It is no surprise that the first-line professions are consistently associated with burnout syndrome and high turnover.

For first-line officers who come in direct contact with the visitor and other employees who also play an important role in the integrated tourism experience as they engage in the provision of services, Middleton and Clarke (2001) argues that their appearance, behavior and their attitude have a strong impact on the customer's perception of the organization they represent. Logically, we could conclude that employee satisfaction is a prerequisite for acquiring a long and stable customer satisfaction.

Pleasant employees offer better and more sensitive service, which, in turn, gives pleased customers. From the foregoing we see that a new approach is meant to boost the competitiveness and diversification of hotel businesses through a combination of both the market and their human potential. Avlonitis and Giannopoulos (2008) accept that the human potential offered by the services is essentially the link between the customer and the business and they report that the role of human resources in customer satisfaction is of particular importance as it "personifies" service inherent in the service, while at the same time, based on the interaction of clients, customers' perceptions of the services provided are shaped.

In addition, business marketing practices "go" through the company's human resources. It therefore appears that the satisfaction of customer satisfaction depends to a large extent on employees' satisfaction, so that a combination of internal and external marketing, can bring more positive results to the business performance. The same scholars further argue that the market—employee combination in the hotel marketing has a different impact on its overall performance enterprise and strengthens its competitiveness.

Siguaw et al. (1994), rely on the theories of Kohli and Jaworski, who studied the relationship between its orientation business to the market and customer satisfaction. An important element in achieving customer satisfaction is the increased customer orientation by the front line representatives. The more the first-person employees perceive the company's practices of rewarding their efforts to meet customer satisfaction, the greater their focus on the needs of their customers. The same thinkers point out that a less market-oriented firm can expect front-line workers to be highly involved in sales, and they may prefer to act in the best interests of the customer. They explain that role vagueness is the result of uncertainty about standards with which job performance is deemed adequate. First-line representatives are not sure what to do and how they do, and they do not know what their tasks are more important because of the ambiguity of their role. The advantage of a market-oriented enterprise is to reduce the ambiguity of the role of workers, especially with regard to the effort they will have to make in their market orientation.

Rizzo et al. (1970) studied the dysfunctional consequences resulting from conflicts of role and ambiguity in complex businesses. They conclude that role conflict and role ambiguity often occur in complex organizations. Represent behaviors arising from a wide range of values and practices that apply, such as standardization, job expectations, communication requirements, and performance appraisal. With the exception of some minor elements of malicious behavior, they discovered behaviors of executives aimed at achieving a production-oriented climate. However, they also identified a lack of support and direction, as well as inadequacy of the objectives and policies of the policy objectives for effective work guidance. Together with a strong policy of responsibility, many executives were under severe stress and work-related stress. Work-related stress is a phenomenon that is increasingly common in modern enterprises and although it is usually manifested by them high-ranking executives can eventually hit all levels of human potential. The feeling of anxiety or otherwise "stress" such as anglophones we encounter, can be considered normal when it occurs at a low level. The intense work demands, however, in a highly competitive environment have made experts refer to an anxiety syndrome known as "burn-nor syndrome." This is a prolonged anxiety that causes intense physical and psychological discomfort with negative effects on performance. Terzides and Tzortzakis (2004, p. 241) for the Greek environment report that work anxiety occurs when an element of work has a negative effect on the physical and mental state of an employee. The workload and unrealistic deadlines, for example, put the worker under pressure, the result of which is stress.

Rigopoulou et al. (2011), following a survey of the catastrophic effects of work-related stress on workers in first-line positions, are studying the correlation between the ambiguity of the same category of workers in banking institutions. The findings of the study reveal that control and proper flow of information is an effective mechanism to reduce role ambiguity. The results also show that the ambiguity of the role negatively affects work performance and job satisfaction, while internal motives are positively related to performance and satisfaction. Moreover, the efficient work of the directors greatly enhances the efficiency of the branch.

Siguaw et al. (1994) point out that a possible gap between the orientation of front-line representatives and the company itself may significantly affect the attitude and behavior of the first.

They thus created the DIFF model to identify the difference, as perceived by front-line workers, between the company's orientation towards the market and the orientation of the front line representatives towards the customer. So the question was raised as to whether 1the role of crash conflict is diminishing as well the gap (DIFF) between the company's orientation towards the market and the orientation of front-line representatives towards the customer is reduced. When the latter perceive compatibility between their role vis-à-vis the client and the role that the business imposes on them, then ambiguity and conflict of roles are reduced. Such compatibility also facilitates a clear identification of expectations, and both parties perceive the same goal (e.g. customer satisfaction) and thus once again confirms the reduction in role ambiguity.

Chen and Chen (2010) investigate the impact of organizational culture on employee behavior as perceived by employees, as well as its relationship with customer service quality. It has been found that customer orientation, orientation towards the competitor, long-term outlook and profit perspective are favorable factors of the organizational culture for the employees to make the latter orientate towards customer-centric behavior. On the part of the administration, it seems that a leadership with characteristics of idealized influence, inspiration and encouragement, stimulation of intelligence and personal contact has positive effects. In addition, the correlation between service quality and customer-oriented behavior leads to positive results.

5 Conclusion—Recommendations

The hotel industry is evolving and changing. The modern tourist has more choices, tourist knowledge, particular desires and requirements than in the past and the international competitiveness among tourist's destinations and luxury hotels is getting stronger. Hotel businesses should be diversified to gain comparative advantages. Their differentiation and distinction in international markets can be achieved by improving the quality of service and the modernization of service procedures (Nousia et al. 2017). Businesses that aim at excellence in service must first understand how their customers perceive impeccable service and then develop and implement a customer service plan that will guide and guide employees in the right direction for the best service. This entails reorienting and redefining the organizational culture of a business.

Organizational culture and business philosophy in Greek hotel realities are of particular interest as there has been considerable growth and development over the last decade. Until now, many hotel businesses have been disadvantaged both in philosophy and in organization. As the Greek tourism industry is characterized by medium or low-capacity accommodation, which in many cases is governed by a family regime, both know-how and manpower from management to the lowest levels of employees have been and still are marked by major shortcomings. A similar shortage was also noted for luxury hotels, limited in number but also in facilities. The presence of a clear philosophy and organizational culture with a combination of internal (employee) and external (customer) orientation, proves the professionalism and the ethos that distinguish an enterprise and are the cornerstone for upgrading services and optimizing service.

Surely the case of the impact of culture upon performance on five star hotels has not been widely examined in Greece. Having in mind that quality plays a key role on a five star hotel and those services are delivered from the personnel, then it is important to have a further research upon this issue. This can be done by using a quantitative research in a sample made of employees and managers. The outcome will help us to understand better this relationship in the setting of a five star hotel.

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Chapter 39
The Synthesis of the Variables Formulates Rewards System Culture (ReSCulture)

Theodoros Stavrinoudis and Christos Kakarougkas

Abstract This manuscript resumes a systematic four-year scientific work, aiming to present the synthesis of the ReSCulture (Rewards System Culture) variables, which will be able to investigate and analyze in depth the role of rewards systems in processes of organizational culture change in the hospitality industry. In line with the above- mentioned main objective, the literature review will summarize the codification of the international theory regarding: organizational culture and the processes of changing it (Cooperrider and Whitney 2005; Burnes 2009; Kotter 2012; Stavrinoudis and Kakarougkas 2016a, b), the obstacles to cultural change (Lozano 2012; Cameron and Green 2015; Kakarougkas and Stavrinoudis 2016) as well as the five interrelated and interdependent groups of elements that constitute a rewards system within an organization (Caudill and Porter 2014; Hall-Ellis 2014; Stavrinoudis and Kakarougkas 2017a). Through the conceptual synthesis of the findings of the two theoretical strands, eleven specialized and complex hypotheses have been emerged, which are being investigated by one hundred eleven ReSCulture variables.

Keywords Rewards systems · Organizational culture · Change · Hotels

JEL Classification M14 · Corporate culture · Diversity · Social responsibility

1 Introduction

The theoretical review of this manuscript will summarize a series of key findings about organizational culture and its change as well as the five interrelated and interdependent factors that compose a rewards system within an organization. Then,

T. Stavrinoudis · C. Kakarougkas (✉)
Department of Business Administration, University of the Aegean, Chios, Greece
e-mail: chrkakarougkas@gmail.com

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based on these key findings, the logical-scientific process that led to the synthesis of the variables formulates Rewards System Culture (ReSCulture) in the hospitality industry will be presented.

2 Literature Review

2.1 *The Elements that Compose Organizational Culture and Support or Suppress Its Change*

The authors through the content analysis of the work of: Handy (1976); Hofstede and Bond (1984); Cooke (1988); Goffee and Jones (1998); Deal and Kennedy (2000); Cameron and Quinn (2011); Weber and Yedidia Tarba (2012); Yahyagil (2015); Bavik (2016); Stavrinoudis and Kakarougkas (2017b) concluded that the culture of an organization is determined by various groups of elements like: Attitude towards change, Power/Hierarchy/Structure, Individualism, Collectivism, Desires/Impulses/Rewards and others. According to Kilman et al. (1985); Kotter and Heskett (2011); Johnson et al. (2008); Schein (2010) the above groups of elements, are displayed and can be located at different levels of depth and degree of visibility to the observer within an organization, namely: shell, mantle and core.

Following the above, the authors found that any attempt to change organizational culture within an organization can be expressed, studied and applied at an individual, team and organizational level (Schein 2010; Driskill and Brenton 2010; Cameron and Quin 2011; Rai 2011; Weber and Yedidia Tarba 2012; Stavrinoudis and Kakarougkas 2016a, b). Along the same lines, any attempt to change organizational culture can turn to three distinct directions: the formal/revolutionary (Lewin 1947a; Burnes 2009), the informal/evolutionary (Lewin 1947b; Thurley and Wirdenius 1973; Cooperrider and Whitney 2005) and the hybrid direction which is a combination of the above two directions of change (Carlström 2012; Kotter 2012). Stavrinoudis and Kakarougkas (2016a, b) found that all three directions are following a separate approach but ultimately are aiming to change organizational culture. This approach is reflected in a series of elements that support/reinforce cultural change in organizations in specific fields of interest. Table 1 presents, regardless of the three directions of change, in a concise and unified way, the most important change supporting elements by fields of interest. At this point, it should be stressed that Table 1 illustrates the general content of each field of interest rather than a detailed presentation.

Finally, any attempt to change organizational culture comes against a series of obstacles that can disorient or even cease the change effort. More specifically, the obstacles to change can be expressed, studied and applied at: individual, group and organizational level (Torres and Gati 2011; Tanser and Lee 2012; Lozano 2012; Cameron and Green 2015; Kakarougkas and Stavrinoudis 2016).

Table 1 The most important change supporting elements by sector of interest

Starting cause (Stavrinoudis and Kakarougkas 2016a, b) • Organizational shock or crisis (Lewin 1947a; Burnes 2009) • Social development, conflict, competition, desirable future (Lewin 1947b; Thurley and Wirdenius 1973; Cooperrider and Whitney 2005) • Stagnation pressure, market analysis and competition (Carlström 2012; Kotter 2012)
Systems/mechanisms/structures supporting change • Changes in: mechanisms, structure, systems, daily work, processes, hierarchical levels and policies (Burke and Litwin 1992; Marks and Mirvis 2011; Newman 2012; Kotter 2012) • Respect and trust (Mohanty and Yadav 1996) • Organizational flexibility (Carlström 2012) • Global and positive commitment to change (Thurley and Wirdenius 1973)
Rewards and motivation/sense of success • Use of strong incentives and rewards (Burke and Litwin 1992; Mohanty and Yadav 1996; Marks and Mirvis 2011) • The achievement of short-term goals, recognition and rewards, the connection of new desirable behavior with the success of the organization (Kotter 2012) • A better common future (Cooperrider and Whitney 2005)
Management/human resources management/change agents • Immediate enforcement without consultation, decisive management in a balancing and coordinating role, and power divided between employer and employee (Thurley and Wirdenius 1973; Burke and Litwin 1992; Mohanty and Yadav 1996) • Development and empowerment of human resources (Mohanty and Yadav 1996; Burke and Litwin 1992; Kotter 2012) • Formation of leadership team (Mohanty and Yadav 1996; Kotter 2012)
Goal setting • Designation and programming of: activities, objectives, commitments, future vision and certain results (Marks and Mirvis 2011; Kotter 2012; Newman 2012)
Organizational climate towards change/fighting barriers to change • Catholic organized effort (Beckhard 1969) • Members' feelings towards change are not counted (Thurley and Wirdenius 1973) • Unpleasant climate of experimentation (Bridges 1986) • Risk encouragement (Carlström 2012) • Collaborative training, interaction, dissemination of learning and voluntary participation (Mohanty and Yadav 1996; Arnold 2010) • Negotiation, compromise and agreement (Thurley and Wirdenius 1973)
Individualism and collectivism • Individual and group factors needs and values (Burke and Litwin 1992) • Individual work (Marks and Mirvis 2011) • Teamwork (Kotter 2012) • Individual motivation and level of participation of each member (Arnold 2010).
Relationships and communication between the organization's members • Open and free communication, conflict resolution, transmission of the new culture from one person to the other, bonds between members (Mohanty and Yadav 1996; Arnold 2010; Marks and Mirvis 2011; Carlström 2012; Kotter 2012)
Time range (Stavrinoudis and Kakarougkas 2016a, b) • Short and long term (Busk Kofoed et al. 2002; Almqvist and Skoog 2006; Carlström 2012)
Desired outcomes (Stavrinoudis and Kakarougkas 2016a, b) • Imposed change of significant level, with immediate organizational adaptation and evolutionary/discontinuous change of minimal level, with gradual organizational adaptation (Almqvist and Skoog 2006; Carlström 2012)

2.2 *The Groups of Elements that Constitute a Rewards System Within an Organization*

Kanin-Lovers and Porter (1991), Cacioppe (1999) argue that the main purpose of a rewards system is to increase the overall competitiveness of an organization as well as to achieve its financial and administrative objectives such as: minimizing wage costs, attracting and retaining appropriate staff, motivating the behavior, effort and enthusiasm of the employees and supporting- facilitating the management of organizational change (Caudill and Porter 2014). Armstrong (2002) argues that a rewards system can be defined as arrangements, in the form of: practices, structures, subsystems and processes aiming to achieve organization's goals. Those arrangements are concerned with providing and maintaining appropriate types and levels of remuneration, bonuses and other forms of rewards and recognition for employees in return for the work they provide in the organization.

The authors, through a further study of the theories on employee rewards and recognition, as well as employee motivation, concluded that a rewards system consist of five interdependent and interrelated groups of elements which are defined/described and expressed at an individual, team and organizational level (Larkin et al. 2012; Moriarty 2014; Caudill and Porter 2014; Hall-Ellis 2014; Stavrinoudis and Kakarougkas 2017a). A summary analysis and presentation of the five groups of elements that formulate a rewards system within an organization will follow. For word saving purposes, the authors present only a small selected sample of the sources they studied and analyzed for the formulation of the ReSCulture variables.

The first group of elements is named the "organization/rewards and recognition system" and describes the system that offers "rewards and recognition" to "human/ employees" based on the "work" they offer to the organization (Armstrong 2002; Caudill and Porter 2014). For example, it includes: Goal performance: performance of an individual in relation to others (Pintrich 2000), Transparent, simple and comprehensible design of the rewards and recognition system, Timely reward of employees (Datta 2012; Brown 2014) and others. Next in an organizational context, "Human/employee" carries out a defined "work" to receive "reward/recognition" (Kanin-Lovers and Porter 1991). The main elements that compose the group of elements "Human/Employee" in the context of an organization's rewards and recognition system are: Employee's individual characteristics like: knowledge and attitudes (Bandura 2011), Rewarding team or individual effort or performance (Armstrong et al. 2011), Employee's individual pursuit for pleasure (Hall-Ellis 2014) and others. Following the above "Needs" of employees will be considered next because they are determining the behavior of employees who, in an explicit or implicit manner, seek rewards and recognition to satisfy them (Pang and Schultheiss 2005; Lawrence and Jordan 2009). Needs includes the following main elements: Need for quick results, Need for safety in the workplace, Need for recognition in the workplace (McClelland 1987; Ho and Kuo 2013) and others. The fourth group of elements is named "Work within an organization" which is defined as the provision of a job or service and the assumption of responsibility for an action or behavior by the "employees" in exchange of "rewards and recognition" (Pitts 1995; Jiang et al. 2009) and is covered by the following main elements: Rewarding the desired behavior, Rewarding of simple and everyday knowledge/skills, Rewarding of complex and specialized knowledge/skills (Larkin et al. 2012; Moriarty 2014; Caudill and Porter 2014) and others. Finally, the group of elements "rewards/recognition" includes tangible or intangible considerations, the organization offers to the employees in exchange for the work they offer (Pitts 1995; Jiang et al. 2009). The main example elements are: Fair distribution of rewards (Steel and Konig 2006), Physical/financial remuneration (Datta 2012), Recognition of good work or effort by the supervisor or manager, The pleasant working environment (Armstrong and Brown 2009; Rose 2014) and others.

2.3 Conclusions of the Literature Review

The main aim of the synthesis of the ReSCulture variables is to investigate and measure in depth the role of rewards systems in processes of organizational culture change in the hospitality industry. For this reason, two different scientific fields were examined. The first includes the concept of organizational culture and its change, and the second the concept of rewards and recognition systems. In relation to the first scientific field, firstly it was emerged that an organization's culture is a complex, intricate and dynamic concept that affects the entire organization at an individual, team and organizational level. Secondly cultural change in an organizational context is reflected on a series of stages and elements (fields of interest) designed to stimulate change initiation, to enhance the transition to the new culture, and to bring specific desired results both in terms of the size of change and the time frame of change implementation (Stavrinoudis and Kakarougkas 2016a, b). Finally, it has been found that a series of obstacles to change (at individual, team and organizational level) can stop or disorient any attempt to change organizational culture, leading the organization to wither (Kakarougkas and Stavrinoudis 2016).

In relation to the second field, it was found that rewards systems are constituting an integral part of the organization's culture in the forms of: Desires/Impulses/Rewards, while they are determined by five interrelated and interdependent groups of elements: Organization/Rewards and recognition system, Human/Employee, Needs, Work within an organization and Rewards/Recognition. It was also found that the central purpose of a rewards and recognition system is to motivate the behavior and the actions of the employees, towards a direction supporting the overall competitiveness of the organization and achieving specific goals, including the change of organizational culture.

The above led to the conclusion that all the groups of elements that constitute a rewards system are parts of the organizational culture in its old form as well as the new one, which is formulated through the processes of change. At the same time, the role of reward systems in organizational culture change processes is to motivate an organization's employees to work in such a way that it will enhance the transition of organizational culture from old and undesirable form to a new desirable one, necessarily changing the rewards and recognition system itself.

3 Methodology

The synthesis of the ReSCulture variables has been partially based on the findings of previous published researches by the authors, as well as more updated findings that emerged through the content analysis of earlier and recent research of other scholars and researchers, which were briefly presented above. The conceptual classification, synthesis and linking of these findings led to the formulation of eleven complex and specialized hypotheses that are investigated through the one hundred and eleven ReSCulture variables. The structure of the hypotheses will be analyzed, as well as the rationale adopted for the selection of the one hundred eleven specific ReSCulture variables and the grouping of the ReSCulture variables per hypothesis.

Focusing on the structure of the hypotheses, Payne and Payne (2004), p. 112 proposed that *"a hypothesis is a reasoned but provisional supposition about the relationship between two or more social phenomena, stated in terms that can be empirically tested and which forms the focus for research, particularly in quantitative studies"*. The eleven hypotheses are characterized as specialized because they aim to investigate and measure in depth the role of rewards systems at specific stages and mechanisms of change processes, that either enhance change of organizational culture in hotels or prevent it. In addition, hypotheses are described as complex because they are designed to measure the correlation between two or more independent variables (cause) and two or more dependent variables (effect). In the case of ReSCulture, the first half of each hypothesis contains the independent variables (cause) i.e. the rewards systems and the specific stages and mechanisms of change processes that reinforce or hinder the change of organizational culture in hotels. While the second half contains several ReSCulture variables visible to hotel employees corresponding to the dependent variables (effect). Finally, the expression '… are positively correlated …' contained in each case describes the type of relationship between the social phenomena that will be studied.

Separating, grouping and mapping the one hundred and eleven ReSCulture variables, into each one of the complex and specialized hypotheses was implemented by using a two-way matrix. Each column of the matrix is intended to match separately each variable/item to core findings of the literature review, thereby justifying the grouping of specific variables/items per hypothesis. Consequently, the study of the content of all five columns is necessary for the understanding and justification of the conceptual classification, synthesis and correlation of each of the variables/items with the corresponding complex and specialized hypothesis. In addition, the above methodological approach: (a) ensured that the ReSCulture variables that correlate with each specialized and complex hypothesis, permeate the whole range of the theoretical findings, (b) helped the researchers to remove redundant/overlapping ReSCulture variables.

4 The Complex and Specialized Hypotheses and their ReSCulture Variables

Table 2 below presents the eleven specialized and complex hypotheses with the one hundred eleven variables/items investigating them, as they emerged from the conceptual classification, synthesis and linking of the findings on: (a) the groups of elements that determine organizational culture, (b) the most important change supporting elements by sector of interest on cultural change processes as well as the directions of change, (c) the five groups of elements that constitute a rewards system, (d) the obstacles to changing organizational culture and (e) the individual, team and organizational levels.

The statistical analysis of the variables/items investigating the eleven complex and specialized hypotheses in Table 2 leads to the achievement of ReSCulture's central purpose, while at the same time it creates specialized models for the role of rewards systems by field of interest in organizational culture change processes (Table 1).

5 Theoretical and Practical Implications

Summarizing, at a theoretical (scientific) level, the above mentioned conceptual classification, synthesis and linking of the literature review findings led to the synthesis of the ReSCulture variables, which are suitable for exploratory and confirmatory factor analysis of the role of rewards systems in the processes of changing organizational culture in hotels. This, combined with the field research that will be conducted, will create a novel/original research tool which will be able to investigate and analyze in depth the role of rewards systems in processes of organizational culture change in the hospitality industry. Additionally, on a practical level, the above will provide to hotel executives a detailed guide with specific and specialized per field of interest elements of a rewards system that are positively correlated with the change of organizational culture or its obstruction.

Table 2 The specialized and complex hypotheses and the variables/items investigating them

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
H^1- In the context of a rewards system, the enhancement of the initiation of processes of organizational culture change, is positively correlated with twelve separate variables					
The hotel culture	Organizational	Organization/ rewards and recognition system	Informal	Organizational climate towards change	Attitude towards change
Human needs	Individual	Needs	Informal	Individualism and collectivism	Attitude towards change
An organizational crisis i.e. risks of bankruptcy	Organizational	Needs	Formal and hybrid	Fighting barriers to change	Attitude towards change
Prolonged stagnation	Organizational	Needs	Hybrid	Fighting barriers to change	Attitude towards change
The competition between hotels	Organizational	Needs	Informal and hybrid	Fighting barriers to change	Attitude towards change and sociability/ extraversion
Every individual employee	Individual	Human/ employee	Informal	Fighting barriers to change	Attitude towards change and individualism
Teamwork	Team	Human/ employee	Informal	Fighting barriers to change	Attitude towards change and collectivism
The job of every employee	Individual	Work within an organization	Informal and hybrid	Fighting barriers to change	Attitude towards change and result/work execution

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
Tangible/financial reward	Organizational	Rewards/ recognition	Formal	Fighting barriers to change	Attitude towards change and desires/ impulses/rewards
Intangible reward i.e. social recognition	Organizational	Rewards/ recognition	Informal	Fighting barriers to change	Attitude towards change and desires/ impulses/rewards
The pleasure that stems from the job	Individual	Rewards/ recognition	Informal and hybrid	Fighting barriers to change	Attitude towards change and result/work execution
A positive vision for the future	Organizational	Rewards/ recognition	Informal	Fighting barriers to change	Attitude towards change and vision/goal setting
H^2- In the context of a rewards system, the enhancement of systems, mechanisms and structures that support the change of organizational culture, is positively correlated with six separate variables					
Job design/characteristics	Organizational	Organization/ rewards and recognition system	Formal	Systems/mechanisms/ structures supporting change	Power/hierarchy/ structure
Connection of success with a certain reward	Organizational	Work within an organization	Formal	Systems/mechanisms/ structures supporting change	Result/work execution and bureaucracy/rules
Connection of every job with the success of the hotel	Organizational	Work within an organization	Informal	Systems/mechanisms/ structures supporting change	Vision/goal setting
Recognition meritocracy	Team	Work within an organization	Informal	Systems/mechanisms/ structures supporting change	

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
					Result/work execution and desires/impulses/ rewards
Fair reward distribution	Organizational	Rewards/ recognition	Formal	Systems/mechanisms/ structures supporting change	Result/work execution and desires/impulses/ rewards
Flexible work hours	Organizational	Rewards/ recognition	Formal	Systems/mechanisms/ structures supporting change	Attitude towards change
H^3- In the context of a rewards system, the enhancement of the feeling of success among the employees, participating in a process of organizational culture change, is positively correlated with sixteen separate variables					
Simple and easy to understand rewards	Organizational	Organization/ rewards and recognition system	Formal	Rewards and motivation/ sense of success	Desires/impulses/ rewards
Quick and timely reward distribution	Organizational	Organization/ rewards and recognition system	Formal	Rewards and motivation/ sense of success	Desires/impulses/ rewards
Provision of better reward in comparison to other hotels	Organizational	Organization/ rewards and recognition system	Formal	Rewards and motivation/ sense of success	Desires/impulses/ rewards and sociability/ extraversion
Provision of the minimum wage	Organizational	Organization/ rewards and	Formal	Rewards and motivation/ sense of success	Desires/impulses/ rewards

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
		recognition system			
Recognition for the execution of basic tasks	Team	Work within an organization	Informal	Rewards and motivation/ sense of success	Result/work execution
Recognition of the final result	Team	Work within an organization	Informal	Rewards and motivation/ Sense of success	Result/work execution
Recognition of the desired behavior	Team	Work within an organization	Informal	Rewards and motivation/ sense of success	Result/work execution
Recognition of everyday knowledge/skills	Team	Work within an organization	Informal	Rewards and motivation/ sense of success	Result/work execution
Recognition of specialized knowledge/skills	Team	Work within an organization	Informal	Rewards and motivation/ sense of success	Result/work execution
Positive outcomes	Organizational	Rewards/ recognition	Formal + Informal	Rewards and motivation/ sense of success	Desires/impulses/ rewards
Tangible/financial rewards	Organizational	Rewards/ recognition	Formal	Rewards and motivation/ sense of success	Desires/impulses/ rewards
Intangible rewards i.e. social recognition	Organizational	Rewards/ recognition	Informal	Rewards and motivation/ sense of success	Desires/impulses/ rewards
The pleasure that stems from the job	Individual	Rewards/ recognition	Informal	Rewards and motivation/ sense of success	Desires/impulses/ rewards
Tips	Individual	Rewards/ recognition	Informal	Rewards and motivation/ sense of success	Desires/impulses/ rewards

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
Periodic increases of the minimum wage	Organizational	Rewards/ recognition	Formal	Rewards and motivation/ sense of success	Desires/impulses/ rewards
The provision of meals or housing	Organizational	Rewards/ recognition	Formal	Rewards and motivation/ sense of success	Desires/impulses/ rewards
H^4- In the context of a rewards system, the enhancement of the role of the management in a process of organizational culture change is positively correlated with seven separate variables					
The competition between hotels	Organizational	Organization/ rewards and recognition system	Informal	Fighting barriers to change	Sociability/extraversion
Clarification of the desired job and behavior from the management	Organizational	Organization/ rewards and recognition system	Formal	Management and relationships and communication between the organization's members	Communication and vision/goal setting
The need of exercising power over the others	Individual	Needs	Informal	Individualism and collectivism and management	Individualism and power/hierarchy/ structure
Reward development according to the hierarchy	Organizational	Rewards/ recognition	Formal	Human resources management	Human resources management
A specific way to promote the employees	Organizational	Rewards/ recognition	Formal	Human resources management	Desires/impulses/ rewards and human resources management
The daily training and guidance from the head of the department	Team	Rewards/ recognition	Informal and hybrid	Change agents and relationships and	Leading figure

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
				communication between the organization's members	
The daily recognition from the head of the department	Team	Rewards/recognition	Informal	Change agents and relationships and communication between the organization's members	Leading figure and desires/impulses/rewards
H^5- In the context of a rewards system, the enhancement of commitment to specific goals, in a process of organizational culture change, is positively correlated with six separate variables					
The need of completing a job	Individual	Needs	Informal	Goal setting	Result/work execution
The need for short term/immediate results	Individual	Needs	Informal	Goal setting	Result/work execution
The objective assessment	Team	Work within an organization	Formal	Goal setting	Result/work execution
The existence of clear and certain criteria of success	Organizational	Work within an organization	Formal	Goal setting	Bureaucracy/rules
The setting of certain objectives by the management	Organizational	Work within an organization	Formal	Goal setting	Vision/goal setting
The support of a unified and certain objective by the reward	Organizational	Rewards/recognition	Formal	Goal setting	Vision/goal setting
H^6- In the context of a rewards system, the enhancement of the creation of a change-friendly organizational climate, in a process of organizational culture change, is positively correlated with six separate variables					
The competition between hotels	Organizational	Organization/rewards and recognition system	Informal	Fighting barriers to change	Sociability/extraversion

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
The motives that stems from the organizational environment	Organizational	Rewards/ recognition	Informal	Organizational climate towards change	Work environment
The needed time for a positive result/reward to emerge	Organizational	Rewards/ recognition	Informal	Organizational climate towards change	Desires/impulses/ rewards
The pleasant organizational environment	Organizational	Rewards/ recognition	Informal	Organizational climate towards change	Work environment
The support of the employee on his/her job from the head of the department	Team	Rewards/ recognition	Formal and informal	Organizational climate towards change	Collectivism and leading figure
The formal training and development of the employees	Organizational	Rewards/ recognition	Informal and hybrid	Human resources management	Human resources management
H^7- In the context of a rewards system, the enhancement of individuality, in a process of organizational culture change, is positively correlated with ten separate variables					
Individual distinction	Individual	Organization/ rewards and recognition system	Informal	Individualism and collectivism	Individualism
The need of exercising power over others	Individual	Needs	Informal	Individualism and collectivism and management	Individualism and power/hierarchy/ structure
The need for safety in the workplace	Individual	Needs	Informal	Individualism and collectivism	Human resources management

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
Individual knowledge	Individual	Human/ employee	Informal	Individualism and collectivism	Individualism and human resources management
Individual expectations	Individual	Human/ employee	Informal	Individualism and collectivism	Individualism and desires/impulses/ rewards and vision/goal setting
Individual behavior	Individual	Human/ employee	Informal	Individualism and collectivism	Individualism and human resources management
Individual job	Individual	Human/ employee	Informal	Individualism and collectivism	Individualism and human resources management
Individual effectiveness	Individual	Human/ employee	Informal	Individualism and collectivism	Individualism and human resources management and result/ work execution
Individual pursuit for pleasure	Individual	Human/ employee	Informal	Individualism and collectivism	Individualism and desires/impulses/ rewards
Recognition of individual effort	Individual	Human/ employee	Informal	Individualism and collectivism	Individualism and result/work execution

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
H^8- In the context of a rewards system, the enhancement of collectivism, in a process of organizational culture change, is positively correlated with ten separate variables					
Team distinction	Team	Organization/ rewards and recognition system	Informal	Individualism and collectivism	Collectivism
The collective decision regarding employee's reward	Team	Human/ employee	Informal	Individualism and collectivism and management	Collectivism
The need for safety in the workplace	Team	Needs	Informal	Individualism and collectivism	Human resources management
Collective knowledge	Team	Human/ employee	Informal	Individualism and collectivism	Collectivism and human resources management
Team expectations	Team	Human/ employee	Informal	Individualism and collectivism	Collectivism and desires/impulses/ rewards and vision/goal setting
Team behavior	Team	Human/ employee	Informal	Individualism and collectivism	Collectivism and human resources management
Teamwork	Team	Human/ employee	Informal	Individualism and collectivism	Collectivism and human resources management

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
Team effectiveness	Team	Human/ employee	Informal	Individualism and collectivism	Collectivism and human resources management and result/ work execution
Team pursuit for pleasure	Team	Human/ employee	Informal	Individualism and collectivism	Collectivism and desires/impulses/ rewards
Recognition of team effort	Team	Human/ employee	Informal	Individualism and collectivism	Collectivism and result/ work execution
H^9- In the context of a rewards system, the enhancement of good relations and positive communication between the organization's members, in a process of organizational culture change, is positively correlated with eight separate variables.					
The fear of social deviation	Team	Organization/ rewards and recognition system	Informal	Relationships and communication between the organization's members	Power/hierarchy/ structure
The effective, open and two-way communication	Organizational	Organization/ rewards and recognition system	Informal	Relationships and communication between the organization's members	Communication
Clarification of the desired job and behavior from the management	Organizational	Organization/ rewards and recognition system	Formal	Relationships and communication between the organization's members and management	Communication and vision/goal setting

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
The need of appreciation/ recognition in the work field	Team	Needs	Informal	Relationships and communication between the organization's members	Sociability/extraversion and communication
Free expression of employees' needs	Team	Human/ employee	Informal	Relationships and communication between the organization's members	Communication and collectivism
The everyday training and guidance from the head of the department	Team	Rewards/ recognition	Informal and hybrid	Change agents and relationships and communication between the organization's members	Leading figure
The social networking of the employees	Organizational	Rewards/ recognition	Informal	Relationships and communication between the organization's members	Sociability/extraversion
The everyday recognition from the head of the department	Team	Rewards/ recognition	Informal	Change agents and relationships and communication between the organization's members	Leading figure and desires/impulses/ rewards
H^{10}- In the context of a rewards system, the enhancement of the immediate/short term or gradual/long term change and revolutionary or evolutionary change of organizational culture is positively correlated with twelve separate variables					
Variables/items that support immediate/short term change					
Tangible/economic reward	Regardless of level	Rewards/ recognition	Formal	Time range and rewards and motivation/sense of success	Desires/impulses/ rewards and attitude towards change

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
Intangible reward i.e. social recognition	Regardless of level	Rewards/ recognition	Informal	Time range and rewards and motivation/Sense of success	Desires/impulses/ rewards and attitude towards change
Job pleasure	Regardless of level	Rewards/ recognition	Informal	Time range and rewards and motivation/sense of success	Desires/impulses/ rewards and attitude towards change
Variables/items that support gradual/long term change					
Tangible/economic reward	Regardless of level	Rewards/ recognition	Formal	Time range and rewards and motivation/sense of success	Desires/impulses/ rewards and attitude towards change
Intangible reward i.e. social recognition	Regardless of level	Rewards/ recognition	Informal	Time range and rewards and motivation/sense of success	Desires/impulses/ rewards and attitude towards change
Job pleasure	Regardless of level	Rewards/ recognition	Informal	Time range and rewards and motivation/sense of success	Desires/impulses/ rewards and attitude towards change
Variables/items that support revolutionary change					
Tangible/economic reward	Regardless of level	rewards/ recognition	Formal	Desired outcomes and rewards and motivation/ sense of success	Desires/impulses/ rewards and attitude towards change
Intangible reward i.e. social recognition	Regardless of level	Rewards/ recognition	Informal	Desired outcomes and rewards and motivation/ sense of success	Desires/impulses/ rewards and attitude towards change

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
Job pleasure	Regardless of level	Rewards/ recognition	Informal	Desired outcomes and rewards and motivation/ sense of success	Desires/impulses/ rewards and attitude towards change
Variables/items that support evolutionary change					
Tangible/economic reward	Regardless of level	Rewards/ recognition	Formal	Desired outcomes and rewards and motivation/ sense of success	Desires/impulses/ rewards and attitude towards change
Intangible reward i.e. social recognition	Regardless of level	Rewards/ recognition	Informal	Desired outcomes and rewards and motivation/ sense of success	Desires/impulses/ rewards and attitude towards change
Job pleasure	Regardless of level	Rewards/ recognition	Informal	Desired outcomes and rewards and motivation/ sense of success	Desires/impulses/ rewards and attitude towards change
H^{11}- In the context of a rewards system, the enhancement of the refusal/obstruction of a process of organizational culture change is positively correlated with eighteen separate variables					
The lack of trust for the new culture	Team	Organization/ rewards and recognition system	Informal	Obstacles to change	Attitude towards change and risk/ innovation
The defense of habits	Team	Organization/ rewards and recognition system	Informal	Obstacles to change	Attitude towards change and bureaucracy/rules

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
The ineffective daily operation	Organizational	Organization/ rewards and recognition system	formal and informal	Obstacles to change	Attitude towards change
The limited communication	Organizational	Organization/ rewards and recognition system	Informal	Obstacles to change	Attitude towards change and communication
The bad work environment	Organizational	Organization/ rewards and recognition system	Informal	Obstacles to change	Attitude towards change and work environment
The lack of technological equipment	Organizational	Organization/ rewards and recognition system	Informal	Obstacles to change	Attitude towards change and risk/ innovation
The existence of strict/ restrictive rules in a team/ department	Team	Organization/ rewards and recognition system	Formal	Obstacles to change	Attitude towards change and collectivism

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
The limited information of the employees from the management regarding the advantages of change	Organizational	Organization/ rewards and recognition system	Formal	Obstacles to change	Attitude towards change and communication
The fear of individual failure	Individual	Human/ employee	Informal	Obstacles to change	Attitude towards change and individualism
The negative predisposition of the individual for change	Individual	Human/ employee	Informal	Obstacles to change	Attitude towards change and individualism
The lack of trust of the individual to others	Individual	Human/ employee	Informal	Obstacles to change	Attitude towards change and individualism
Individual behavior (culture)	Individual	Human/ employee	Informal	Obstacles to change	Attitude towards change and individualism
Individual stereotypes of the employees	Individual	Human/ employee	Informal	Obstacles to change	Attitude towards change and individualism

(continued)

Table 2 (continued)

Variables/Items	Level	Groups of elements constituting a rewards system	Direction of change	Supporting elements to the implementation of change	Elements determining organizational culture
The lack of individual knowledge (data)	Individual	Human/ employee	Informal	Obstacles to change	Attitude towards change and individualism
The threat to individual interests	Individual	Human/ employee	Informal	Obstacles to change	Attitude towards change and individualism
The fear that a person will acquire inferior knowledge to what he/she already has	Individual	Human/ employee	Informal	Obstacles to change	Attitude towards change and Individualism
The differences on the educational level from one employee to the other	Individual	Human/ employee	Informal	Obstacles to change	Attitude towards change and individualism
The need of the individual for control and certainty	Team	Human/ employee	Informal	Obstacles to change	Attitude towards change and individualism

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Chapter 40
The Contribution of HRM on the Development of Effective Organizational Culture in Hotel Units — The Case of Greek Hotels

Dimitrios Belias, Efstathios Velissariou and Ioannis Rossidis

Abstract The paper examined the case of the impact of HRM on the development of an effective culture on hotels, based on material gathered from the existing literature. From the findings it is certain that HRM and culture are interacting each other. What is important is to understand this relationship in the framework of hotel management in Greece, having in mind that there is not any similar past research. Nonetheless, the existing research provides evidence that most of the HRM departments on Greek hotels seem not to develop effective policies and practices so to leverage their corporate culture. This is surely a weakness from the side of the hotel managers, owners and executives. The authors have concluded that there is a need to further investigate this framework with a future empirical research.

Keywords HRM · Culture · Hotels · Greece · Tourism

JEL Classification Z32 · L83 · M10

1 Introduction

Corporate (or business, or organizational) culture is a system of common values, beliefs, principles, assumptions, concepts, meanings that make up a common mental frame of reference that determines how they think and how people behave. It is a set of guiding beliefs, perceptions, and ways of thinking that embrace the members of a organizations that are taught to new members as properly. Culture represents the unwritten, emotional part of the organization. All these (values,

D. Belias (✉) · E. Velissariou
Department of Business Administration, Technological Educational Institute of Thessaly, Larissa, Greece
e-mail: dbelias@uth.gr

I. Rossidis
University of the Aegean, Mytilene, Greece

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principles, belief etc.) are expressed by rules that define the decisions and attitudes of individuals and groups in everyday practice. Rules are expectations about which are appropriate or inappropriate attitudes and behaviors. They are socially formulated models that help us interpret and evaluate which behaviors are appropriate and which do not (Torrington et al. 2005; Aspridis 2004; Aspridis 2007; Aspridis and Kyriakou 2012).

Corporate culture is affected from a number of elements, which include Human Resource Management, also well known as HRM. As a matter of fact there is a high level of relationship between those two factors, where both HRM and culture seem to affect each other (Greer 2001). The paper aims to investigate one aspect of this relationship, which is the effect/contribution of HRM upon the development of an effective corporate culture on hotel units, by examining the case of Greece. This paper has been developed so to fill in the gap which exists in the current literature since there is not such research in Greece. The methodology used is the literature review where the paper will rely on the papers and reports which focus on the examined issues. The expected results is to create a first glance of what happens in the Greek hotels but also to prepare the ground for future researches.

2 Literature Review

2.1 History

Human Resource Management (HRM) roots may as well be put on prehistoric times where the tribes employed fixed methods to decide their leaders. Kinds of HRM techniques were used by ancient Chinese and Greeks as well, during the period from 2000 B.C. to 1500 B.C.. Hundredths of years later, industrial revolution induced the introduction of labor unions and the establishment of the first HR department by B. F. Goodrich Company in 1900. The above tactic was then adopted gradually by several other companies (Niles 2013; Belias et al. 2015).

Although its ancient roots, HRM was not formed as a solid science until the early 1900's, when Frederick W. Taylor proposed Scientific Management principles to implement an innovative pay system. Taylor's program was based on the following axes: Subdivision of a task into its components Choice of the most suitable workers for the task Offer of the necessary training and motivation for the task Scientific planning of job performance (Niles 2013). The above principles introduced the concept of Taylor's task idea: "planning out every job in minute detail; giving precise instructions on what to do, in what order, at what speed; and eliminating wasteful or unnecessary actions" (Price 2007). This movement, widely known as Taylorism, was one of the earliest "one best way" techniques and proved the basis for posterior methodologies like just-in-time (Price 2007).

During the next decades various theories had been developed. Human Relations movement was introduced in 1920's focusing attention on humans, contrary to

Taylorism. Hawthorne studies, taken place at Chicago and organized by Western Electric Company in collaboration with Harvard Business School, were the main stimulus of the current theory. The main concern of this effort was to investigate whether and how the working conditions affect workers' performance and concluded that, in the long run, productivity is closely linked with job satisfaction (Price 2007; Senyucel 2009; Belias et al. 2016).

This conclusion, sine then, has been confirmed by several other studies. Human Behavior theory dominated HR thought during 1950's and 1960's concentrating on incentives that motivate employees and on leadership effectiveness. A number of actions are implemented to protect workers' rights (employment standards, sequal equality etc.) and Maslow's theory is widely adopted. Maslow claimed that people work not only for their physiological needs but also to fulfill a number of other needs too, like safety and self–actualization. Maslow's theory is popularly known as hierarchy of needs (Price 2007).

Human Resource Management came to surface in 1980's when the traditional personnel management could not keep up with the ever—changing environment. The main argument of the current theory was that employees are to be treated like an asset and not as a cost if the firm is to be up to date in both operational and strategic level and secure a competitive advantage (Senyucel 2009). Please note that HRM should not be confused with Personnel Management since the former is a continuous and more systematic activity than the latter. The HRM's theory fundamentals are studied thoroughly in next sections of the current study.

2.2 *Introduction to HRM*

Taking an in-depth view of Human Resource Management presupposes to provide a theoretical framework about what HRM exactly is. The related literature offers a great number of definitions. In the current study we are going to cite some of the most important ones to help us take a first glance on its philosophy. According to Noe et al. (2013), HRM is defined as: "The policies, practices and systems that influence employees' behavior, attitudes and performance".

Graham (1978) defines that "the purpose of HRM is to ensure that the employees of an organization are used in such a way that the employer obtains the greatest possible benefit from their abilities and the employees obtain both material and psychological rewards from their work". (Storey 1995) argues that "HRM is a distinctive approach to employment management which seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce, using an array of cultural, structural and personnel techniques". Other sources determine that HRM "consists of all the activities undertaken by an enterprise to ensure the effective utilization of employees toward the attainment of individual, group and organizational goals" (Helms 2006). We could summarize those definitions arguing that the HRM concept is about "achieving success through people" (Armstrong 2006).

A closer look to related literature indicates that two schools of thought dominate HRM, the soft and the hard one. Truss et al. (1997) claim that the main difference between the two sides is whether attention should be focused on human or on resource. Soft HRM is concentrated on the incorporation of individual talents into firm's operation and is associated with McGregor's theory Y. On the other hand, hard HRM school argues that HRM strategy is interlinked with the overall strategic goals of the firm.

Despite the two different HRM variants, the majority of scientists and managers agree that effective Human Resource Management is a crucial factor in a firm's long term success. Huselid (1995) conducts a survey among nearly one thousand firms inquiring the impact of high performance work practices on a firm's overall performance. Huselid's paper indicates that such practices not only offer higher productivity and enhanced corporate financial performance but also are linked with lower employee turnover. Koch and McGrath (1996) also confirm that HRM practices are associated with higher labor productivity. When carefully organized and scientifically planned, recruitment and selection practices offer better results for the firms, especially in the case of capital-intensive ones.

Further analysis presupposes to take a closer look at HRM's characteristics and goals. According to Armstrong (2006), HRM is characterized by the following principles:

- Diversity: HRM implementation has to be adapted so as to fit in each organization's profile
- Strategic nature
- Commitment-orientated nature
- People treatment as human capital: employees are an asset, not a cost
- Unitarist philosophy: employees' and employers' goals are mutual
- Management-driven activity
- Focus on business values.

In terms of objectives, HRM is to achieve goals among various aspects within an organization. The action field of HRM is extended in the following areas (Torrington et al. 2005):

- Staffing Objectives: HRM is to guarantee that the firm is recruited with the appropriate staff so as to secure the smooth and successful run of necessary functions. The firm ought to have the right number and types of employees to achieve the fulfillment both of its operational and strategic goals.
- Performance Objectives: Having recruited the right staff, a firm has to ensure the motivation and commitment of workforce, so as to guarantee a high performance level. HR managers are responsible for the training, development, discipline and reward of employees.
- Change-management Objectives: HRM is a matter of utmost concern when dealing with changes. Vast majority of staff prefer stability and are chary of changing in working conditions and environment. It is more than important for a firm to develop the right staff skills and encourage acceptance of change.

- Administration Objectives: Last but not least, HR department is dedicated with the smooth running of a firm in terms of labor issues.

Being more specific, HRM department is concentrated in achieving the following goals (Xirotiri-Kufidu 2010):

(a) Increase productivity
(b) Improve quality of life in workplace
(c) Comply with legislation
(d) Create competitive advantage
(e) Ensure flexibility in terms of workforce.

2.3 *Strategic Human Resource Management*

Having developed a theoretical framework of HRM, in the current section we are going to argue on Strategic Human Resource Management (SHRM). Increased competition in a global, instead of national, level, has emerged HRM as a vital function within an organization. Strategic importance of HRM and its impact on overall firm's performance is a self-evident since strategic nature is one of the main HRM's characteristics. Besides, the link between HRM and performance is proved through a number of surveys, some of which have been already mentioned.

Conceptualization of SHRM presupposes a wider definition of strategy. Chandler (1962) claims that "strategy is the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals". According to Purcell (1999), "the emphasis (in strategy) is focused on actions that differentiate the firm from its competitors". By extension, "Strategic HRM covers the overall HR strategies adopted by business units and companies and tries to measure their impact on performance" (Lengnick-Hall et al. 2009). In other words, HR strategy consists of all the staff-related policies and activities in the direction of achieving long term goals.

As any other business strategy, SHRM may as well be divided into and expressed as component of the following elements (Armstrong 2006):

- Vision: an approach of organization's ambitions and aspirations
- Mission: the dominant – key purpose of organization's existence
- Specific goals: goals the organization sets
- Strategic objectives: the translation of specific goals into strategies.

Five SHRM approaches are found in the related literature. Each of them is illustrated in the following paragraphs.

The resource-based approach

The current approach lies on the argument that competitive advantage for a firm derives from the effective deployment of resources. The attention is focused on human capital and its skills. As long as a firm invests in its human resources, workforce enhances its strategic capability and develops its ability to understand strategic issues. The above fact lets the firm gain a competitive advantage over its rivals (Armstrong 2006).

Strategic-fit approach

Strategic-fit approach, or Contingency approach, consists of two dimensions: the vertical and the horizontal one. Vertical, or external, fit refers to the inclusion of HR strategy in the overall firm's strategy and the support of the former to the latter one. On the other hand, horizontal, or internal, fit is concerned with the integration of all the activities and policies within HR strategy (Torrington et al. 2005).

High-performance management approach

According to Armstrong (2006), the current approach is focused on achieving high performance productivity, quality, level of service etc. through people. "High-performance management practices include rigorous recruitment and selection procedures, extensive and relevant training and management development activities, incentive pay systems and performance management processes" (Armstrong 2006).

High-commitment management approach

Armstrong (2006) defines high-commitment management as "a form of management which is aimed at eliciting a commitment so that behavior is primarily self-regulated rather than controlled by sanctions and pressures external to the individual, and relations within the organization are based on high levels of trust".

High-involvement management approach

High-involvement management approach claims that employees are to express their opinion and participate in decision making. They should be treated as partners. The main goal of this approach is to provide climate of continuous dialogue so as to ensure that all members of the firm are familiar with what and how has to be achieved (Armstrong 2006).

2.4 The Notion of Culture

Culture gives members of an organization a sense of organizational identity and creates a commitment to beliefs and values that are greater than that. Although the ideas that are part of the culture can come from anywhere in the organization, the culture of an organization usually starts with a founder or an original leader who formulates and applies specific ideas and values as a vision, philosophy or business strategy. When these ideas and values lead to success institutions become and an organizational culture emerges that reflects the vision and strategy of the founder or leader (Armstrong 2006).

Culture serves two key functions in the organization: (1) to rally members to know their relationship with other members; and (2) to help the organization adapt to the external environment. Internal integration means that members develop a collective identity and know how to cooperate effectively. Culture is the one that governs everyday working relationships and determines how individuals communicate within the organization, what behavior is acceptable or unacceptable, and how power and authority are shared (Torrington et al. 2005).

External integration concerns the way the organization achieves goals and deals with third parties. Culture helps guide the day-to-day actions of employees in order to achieve certain goals. It can help the organization respond quickly to the needs of the client or to the movements of a competitor. Culture plays a key role in moving an organization from the middle to truly exceptional performance. The organization's culture also drives decision-making from employees when there are no written rules or policies. Thus, both functions of culture are linked to the constitution of the social capital of the organization, creating either positive or negative relationships within and outside of the organization (Armstrong 2006).

2.5 General Information on Tourism in Greece

Tourism is a financial and social phenomenon whose development after the end of World War II has attracted great interest both in developed and developing countries. It is understandable that in any case tourism cannot be a panacea for addressing all economic and social problems of the countries trying to develop it, however it has proved in practice that under certain conditions it may contribute significantly to economic development. That is also the reason why development is increasingly sought after more particularly from developing countries (Singh 2008; Trivellas et al. 2015).

The worldwide tourism development trend was admittedly impressive, since for many decades now it is recognized as the world's largest industry. The factors that contributed to this were primarily an increase of people's disposable income, more free time for vacation and relaxation, rapid technological developments in public transport and especially on planes and finally the simplification of formalities in the host countries and tourist accommodation (Singh 2008). However, nobody can deny the contribution of tourism as an economic and social phenomenon. Regional development aims to the balanced development of the national territory, which is imposed for reasons of social and national interests with a view to mitigating the income and productive contrasts between the center and periphery and the discouragement of internal and external migration (ICAP 2015).

Tourism, which is relying on the exploitation of tourism resources (cultural monuments, natural scenery, etc.), is an activity, which is characterized by the consumption of the product (tourism product) in the place of "production". This means that the "product" is not transferred to the market, but the consumer – tourist, consumes at the place of production. This fact denotes the decentralized structure of tourism and its contribution to regional development (Singh 2008).

Regarding Greece, it must be said that tourism is much more important than in Britain, since Britain has many other sector and at the same time Greece relies on Tourism. Overall, Greece from the early postwar years is listed among the countries of Europe with the most tourism. International tourist arrivals were almost non-existent in 1950, reaching 13 million in 2001, 15 million in 2012 and 23 million in 2017 (estimation, ICAP 2015). The natural environment, cultural heritage and rich history have been and still are the advantages of Greece as a tourist destination. The cultural heritage, long coastline and natural beauty bring to Greece significant comparative natural advantages, leading it to be one of the main tourist destinations worldwide. A key feature of the Greek tourism product is the geographic definition of foreign demand, as a whole almost from the European continent, with the ratio not to indicate a significant change in the last decades.

Among the economic sectors related to the tourism sector, hospitality holds the most important place in the tourism infrastructure. Depending on the location and its characteristics, hotels divided into urban, which are located in urban centers and work year on year, and seasonal operation hotels, which are geographically scattered in the surrounding region and the vast majority are located in coastal and mainly islands (ICAP 2015). Different characteristics both in terms of structure function as well as economic performance are observed on hotel units located in areas with different tourist activity. These are the areas where tourism is the major part of the economy, and are called saturated areas. It is significant that 70% of the hotel capacity in the country is concentrated in these areas.

According to the UNWTO (2011) the five main components that make up the overall tourist product are the following:

1. The attractions of the destination, which can be natural (landscape, coast) man-made (historical city), cultural (museums, theaters) or social (lifestyle).
2. The facilities of the destination, to be enjoyed by tourists. These include accommodation, restaurants, shops, transport etc. There is often an overlap between attractions and facilities.
3. The accessibility of the site, which is related to how easily and quickly can someone reach tourist destination, as well as the cost included. It is therefore a matter of transportation infrastructure and transportation technology.
4. The image of the destination, which expresses the images that tourists shape about what they see and where they go. The images that people shape regarding the various tourist destinations, when assessed, evaluated and combined with other factors result in the travel decision making.
5. Finally, the price of the tourism product, i.e. the total cost of travel, accommodation, food and participation in activities.

The main productive sectors that make up the tourism and travel sector are (UNWTO, 2011):

1. The branch of hosting services, including all the tourist facilities that provide hosting services
2. The catering industry, which includes restaurants, cafes, bars etc.
3. The industry of intermediaries, i.e. tour operators and travel agencies
4. The transport industry-road, marine, rail and air transport

5. The entertainment industry which includes fun, entertainment and sports
6. The industry of food supply which includes the activities of companies that focus on preparing and serving food and drinks outside home
7. The car rental branches which include large international and small local independent companies.

The satisfaction of the tourist needs or desires of the members of a modern society requires the production of as many as possible tourism products. These products can take the form of physical products, i.e. services, such as hotel accommodation and entertainment. Intangible tourist products include different states or forms of energy sources, such as electricity, air-conditioning, central heating, telephone etc., necessary elements for the production of hospitality services.

Many products that people need to satisfy tourist needs or desires are free in nature, such as light and heat of the sun, the oxygen in the air etc. Such products are usually characterized as free products and are not subject of study and analysis of tourism and general economy. The tourism economy deals with the study and analysis of tangible and intangible tourism products, namely tourism goods and services resulting from the productive effort of people which serve to meet tourist needs or desires. These products are also known as financial products. Their main characteristic is that when compared to the tourist needs or desires they satisfy, they can be found in limited quantities, i.e. they are inadequate (Buhalis and Costa 2005).

Tourism businesses are production units with or without legal personality, in which one or more people make decisions about the production of tourism goods and services. With these decisions of the tourism businesses it is determined what goods and tourist services will be generated, in what quantity, the quality and varieties of the production process, at what price they will be sold and various other minor problems of the tourism businesses. As every business, its main purpose and guide in the decision making process is profit maximization, since the bigger the profit, the larger its survival and growth in a long term perspective. Large tourism businesses which usually do not have any economic problems and employ large numbers of staff, profit maximization is not only evident but also scheduled. In small businesses, however, the effort to maximize profit is greater. Tourism businesses as organizational entities which own and operate hotels, travel-tourism agencies and other tourism units can take the form of a tourism business (Buhalis and Costa 2005).

2.6 The Tour Operators

The tour operators carry a separate operation in the tourism industry. They usually buy in large quantities a range of various tourism services, such as transportation, accommodation, as well as several other services which are all combined in a "package" which is then sold either directly or indirectly to various users, i.e. tourists or, if one wants to be more exact, potential tourists (Cooper 2012). The tour operator is sometimes characterized as a wholesaler of tourist services, but this is only partially right. The tour operators, as it has already been mentioned, buy tourist services which they later sell in packages in small quantities to their customers for a desired profit. At the same time, they sell individually some quantities of the various tourist services purchased for profit reasons or some times for reasons of urgent necessity (Cooper 2012). In the first case, when they combine to a single package various individual tourist services they operate as producers of the tourism product, not taking into account whether the services were used the same way they were produced or not. In the second case, i.e. that they resell individual tourist services, just as they are purchased, they undoubtedly operate as wholesalers of tourist services. At this point it should be said that there are certain tour operators who sell individual tourist services at low prices to people who wish to make their tourism packages themselves as they please. In these cases sell individual tourist services, although in retail, but at low prices (Buhalis 2001).

There are four basic types of tour operators (Cooper 2012):

- Those who serve the mass tourism market, which are the most famous. The tourist packages that are sold are mainly popular international destinations like resorts, and transportation of the customers either by private airplanes, or chartered planes, or planes operating scheduled flights.
- Those who are designated as specialists who are less known than the previous, but are numerically significantly superior.

They are divided into five categories:

- To those who offer tourist packages and are addressed in a particular category of customers, for example young people, bachelors, families, professionals
- To those who offer tourist packages in specific destinations such as England, France, Hungary, Switzerland, Austria
- To those who use in their tour packages specific types of accommodation, such as holiday villages and holiday centers
- To those who use specific means of transport for their tourism packages, such as ships, trains, airplanes, buses
- To those who offer special tourist packages for various tourist interests, such as photographic safaris in Kenya or Hiking on Mount Kilimanjaro
- Those who serve the local tourism market, i.e. those tour operators that combine and sell their tourism packages in the country that tourists reside, which means that all destinations are inside the country
- Those who serve foreign tourists in the tourist destinations, which are those established in tourist destinations and combine packages only for them, which they then sell to different countries and especially.

2.7 Travel Agencies

In Greece the first travel agencies operated substantially in the early 1950s (Karagiannidis Travel-Line, CHAT TOURS, Arvanitis Travel, Athanasoulas Travel, Hermes Travel). The main object of their activity was originally the immigrant tourism to America and Europe. They then operated as representatives of foreign American and European airline services. Since 1955 they started cooperating with Eastern Europe and much later, in the 1970s, with the Arab countries (Vrana et al. 2006). In the early 1950s almost 20 travel agencies existed in Athens, who made a big shift from the tourism of the rich, to mass tourism. The travel agents work as intermediaries of tourism trade products. They work like a retailer in the distribution system of tourism products (Buhalis 2001).

Normally the travel agent does not sell its own product, but act on behalf of producers or suppliers of tourism products. In other words, they buy tourist packages and individual travel services, such as tickets for various means of transportation, hosting services in accommodation etc. Then make them available to the public so as to satisfy the existing tourist needs or desires of future tourists. Theoretically, the travel agent is an experienced professional, specialized on transporting people for touristic or any other reasons either in their country of origin or abroad. They provide customers with a wide range of personal services ranging from simple tips to planning a trip. Because of this the travel agents could be classified as Travel Consultants (Buhalis and Licata 2002). Travel agents are divided into two types:

- Those who develop their professional activity only within the country in which they are established and
- Those who develop their professional activity both within the country where they are established and beyond that.

2.8 The Tour Package

In an oversimplified version, the intangible tourist products which are offered combined are characterized as packages or tour packages which include five key elements in their simplest form:

- The tourist destination: This usually concentrates raw materials which cannot be transported elsewhere for production of the tourism goods and services, such as natural, climatic and cultural elements which simultaneously constitute some of the most important considerable charms of a destination
- The means of transport: This is what the tourist used in order to travel to the tourist destination of their choice. The means of transport which is most commonly used for short or larger distances is the airplane

- The accommodation: This is the place that hosts the tourists both in the tourist destination which is the purpose of the visit and throughout the tourist's travel from the place of permanent residence to the chosen destination and vice versa
- The breakfast: This is one type of meal which is most commonly used not only in these simple packages which are produced and offered in their simplest form, but in all general packages which are produced and offered to meet specific tourist needs or desires of their buyers
- The Transfers: They ensure comfortable transportation of the tourist from the point of arrival of the tourist destination visits (airport, port, railway station etc.) to the hotel or any accommodation center and vice versa.

Tourist accommodations are reception businesses which normally or periodically offer customers services of accommodation, as well as services related to residence, such as catering, entertainment, sports, etc. In Greece tourist accommodation is categorized in accordance with the provisions of Decision 530992/1987 of the General Secretary of the Greek National Tourism Organisation (EOT) on the technical specifications of tourist facilities (FEK 557B') in the following two categories:

Main hotel accommodations, which include the following accommodation types:

Classical hotels
Accommodation like motels
Accommodation like furnished apartments
The classic hotel type and furnished apartments.

Non-primary or additional hotel accommodation, which is divided in the following categories:

Sites of organized camping with or without hutches
Furnished holiday villas or homes o Rooms to rent in a complex of up to 10 rooms
Rent furnished rooms Of course the types of tourist accommodation at the host sites are numerous, of different types and categories and these characteristics depend to a large extent to various factors such as the location, the model of tourism development, the type of tourism. All the above factors as well as the characteristics of accommodation identify the quantitative and qualitative structure of the tourism supply and therefore the type of tourism product offered to consumers (Andriotis 2006).

3 Methodology

The methodology used is the literature review where the paper will rely on the papers and reports which focus on the examined issues. The author has relied on online resources such as EBSCO and emerald along with resources from Greece such as from ICAP.

It is important to mention that the resources have been retrieved from reliable sources, such as well known journals and ICAP which is the most credited resource for industry reports in Greece. This helps the authors to produce a reliable set of resources.

4 Discussion

Successful businesses have as a key feature of their culture and practice to attract and retain the right people. This is expressed by clear criteria for assessing people and keeping them strictly. A key prerequisite for the existence of the right people is the deep and common belief of all executives, and above all those of senior management, that the right people is the most critical factor of competitiveness and success, and that the ability of the business to have the right people is competitive advantage (Chen et al. 2012). This practically means that all executives assume their responsibilities in this regard by actively and effectively participating in the attraction, selection, development and maintenance of the right people, as well as in the removal of the wrong ones. A key element of this culture is the attitude of executives towards people who have to move away from the business. This means direct treatment of people with moderate performance, either by moving or by removing. Maintaining the wrong people, firstly, causes quite a lot of problems for the right people and, second, it has significant negative consequences for the performance of the unit and the company as a whole.

Corporate culture, among other things, reduces social uncertainties and leads people in a common direction, thus contributing substantially to coordination, synchronization, good relations, cohesion and co-operation. Common values, beliefs, meanings, concepts, principles and informal rules create common standards-criteria for all employees about what is right or wrong, what is good and what is bad, what is important and what is insignificant, what is urgent and what is not urgent. This reduces the uncertainty as to what appropriate or inappropriate decisions and behaviors are. This common frame of reference leads people in a common direction. It allows them to cooperate effectively and feel that they belong to a community (Chand 2010).

The common culture leads people in the same direction and facilitates collaboration, synchronization and co-ordination. Particularly today, when businesses have to face great complexity and uncertainty, co-ordination, co-operation and mutual adjustment between people is increasingly needed. But these can not be achieved only through bureaucracy and hierarchy. Particularly in the case of multinationals and multinationals, the existence of a common corporate culture, together with the subculture of the groups of the various sites, is a crucial factor in ensuring common direction, cohesion, co-ordination, cooperation and integration (Tsaur and Lin 2004).

At this point, is it essential to remark the fact that tourism relies a lot on the human capital of the hotels. Especially on countries such as Greece which fosters crowds of tourists but also it aims on achieving high levels of services quality, hence it is important to create a culture which will focus on the customers needs and on achieving high performance. Since culture is something intangible, the HR will have a crucial role into learning the ideal culture to the hotel's personnel. It is understood that all of HR's functions, including recruiting, training, evaluation and other functions (Hoque 1999).

On the aspect of the Greek hotels, there is a limited research. Maroudas et al. (2008) have noticed that seasonality often does not leave much time to create a culture which will leverage the hote. Papalexandris and Stavrou-Costea (2004) have remarked that often Greek hotels do not invest the expected resources on their HRM so to shape the appropriate culture. Finally, there is the case of Giousmpasoglou (2014) who wrote that today the attention of HRM is given on shaping the upper management's culture and therefore to pass this culture on the rest of the personnel.

5 Conclusion—Recommendations

Most people want to work in an organization—a business for which they feel proud, express and wish to belong to it. Culture is one of the most fundamental elements of the identity-image of an organization, which creates a sense of community for the people. To the extent that individual culture, that is people's values and beliefs, matches that of the organization, individuals feel more "identifying" with him, feel they belong to him, that is, they feel more committed — devotion to him. Corporate culture can provide two important elements for the competitiveness and sustained success of a business in the modern environment. First, it ensures disciplined thinking and action without external controls. The efficiency, performance and success of a business requires people to behave appropriately. These behaviors are secured in two ways. Firstly, through external control usually achieved through the hierarchy, supervision of bosses and bureaucracy (such as written regulations). A second way to ensure the right behaviors of people is through self-control. That is, people on their own 'have understood what are the right behaviors, the contexts in which they have to move, and by discipline they develop because they believe and want it themselves, not because they are forced by a boss or regulation. In the Greek tourism sector, it seems that Greek hotels lack of the necessary HRM policies and practices which will leverage their culture. It is important to remark that the lack of research leads the authors to conclude that there is a necessity of a future research which will bring some necessary empirical evidence on this issue. Hence a future research, using quantitative means, into a sample of hotel managers and employees will bring more light and evidence.

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Chapter 41
How to Overcome the Challenges of Using Netnography in Tourism Research? Reflections on a Ph.D. Journey

Medéia Veríssimo and Carlos Costa

Abstract With the increasing relevance of the use of Internet to contemporary world, online spaces are outstanding as a fruitful field for research. In this context, netnography, also known as online ethnography is emerging as a method progressively used in tourism research. However, as netnography is still a recent method, it lacks further understanding and exploration of its use in the context of tourism studies. Thus, this study aims at identifying the challenges in using netnography as part of the research process in tourism. By describing online ethnography as one of the phases of a mixed-methods study, it addresses how challenging can be finding online groups and reaching the right audience, dealing with the amount of online data and applying complementary methods and triangulation in the context of a Ph.D. thesis in tourism. Finally, this study reflects on strategies to overcome those issues in order to contribute to a diversified methodological discussion in tourism academia.

Keywords Tourism research · Methodology · Mixed-methods · Netnography

1 Introduction

With the increasing number of people using online communities such as newsgroups, blogs, forum, social media, podcasts, image sharing sites, etc., the internet becomes an important site for research (Bowler 2010). Online tourism sites have also turned into effective tools where tourists are increasingly open in sharing their experiences, posting online reviews and comments about tourist services and turning online communications platforms into a space for data collection. From the online communications platforms, it is possible to gather information about symbolism, meanings and consumption patterns of specific online consumer groups.

M. Veríssimo (✉) · C. Costa
University of Aveiro, Aveiro, Portugal
e-mail: medeiaverissimo@ua.pt

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Traditionally, ethnography provides tools in understanding offline dynamics, but due to the emergence of online social dynamics, new approaches are required.

Netnography, also called online ethnography, emerged as ethnography adapted to the study of online communities “Netnography is Internet, or technologically networked, ethnography. It is ethnography adapted to the complexities of our contemporary, technologically mediated social world”, as defined by Kozinets (2002; 2010, p.3)

As a method, netnography is faster, simpler and less expensive than traditional ethnography and more naturalistic and unobtrusive than focus groups or interviews. According to Kozinets (2002), there are two main reasons in using netnography approach to marketplace and its related fields. Firstly, there is an increasing recognition on the importance of the Internet for customers. They are active online and often taken part in discussions informing other consumers about products and brands. Secondly, if one of the main goals of marketing research is to identify and understand taste, desires, symbol-systems and decision-making influences of a particular consumer group, online communities are the contemporary field place.

With the increasing relevance of online field to our contemporary world, netnography is rapidly emerging as a suitable method that supports social sciences’ understanding in analyzing a variety of perspectives, including the tourism field. On one hand, there is an interest on the part of academic fellows to use netnography, on the other hand, many consider netnography as a recent field that remains a not so confident method mostly, because the low rigor in its application Mkono and Markwell (2014). However, this scenario seems to be changing (Mkono and Markwell 2014), asit is expected that netnography will be more accepted as an efficacious methodology due to an increasing number of publications in top ranked journals. Therefore, this study aims at identifying and describing the challenges in using netnography as part of the research process in tourism, reflecting on and addressing how these issues were overcome over the course of a Ph.D. research.

2 Netnography in Tourism Research

Netnography is based primarily upon the observation of textual discourse. Different from in-person ethnography, it balances the online discourse and behaviour in their online context (Kozinets 2002). Moreover, netnography is different because it treats online communications not as mere “content,” but as social interaction, considering that the words play a role of cultural artefact and express meaning (Kozinets 2010). To be considered as an netnographic investigation all that may be required is that the data analysis must understand consumers in the online and communal cultural context which they are immersed, this is more important than the way that the analysis is conducted (Kozinets 2006).

According to Kozinets (2010), there are some fundamentals of netnography:

1. It is naturalistic, following social expression to its online appearances;
2. It is immersive, drawing the researcher into an engaged, deeper understanding;
3. It is descriptive, seeking to convey the rich reality of contemporary consumers' lives, with all of their hidden cultural meanings as well as their colourful graphics, drawings, symbols, sounds, photos, and videos;
4. It is multi-method, combining well with other methods, both online and offline, such as interviews and videography. Like all methods, netnography often works even better when triangulated with other sources of insight;
5. It is adaptable, moving effortlessly from newsgroups to blogs, wikis, virtual worlds, social networking sites, podcasting and mobile online/offline communities and whatever else the future has in store.

Such as ethnography, there are types of netnography concerning the levels of researcher's participation in the online community, which include participating in interactions, practices, exchanges and information (Kozinets 2006). Observational netnography places the researcher apart from its object of study, he is a mere observer. Participant netnography is when netnographer becomes a member of the group internalizing their meanings to speak with authority of a member who represents that culture. Autonetnography is where individuals reflect on their own online experiences and then use these field notes and observations to provide insights into online consumer practices and meanings (Mkono et al. 2015).

The application of netnography in tourism studies has been increasing among tourism researchers and has been applied with diversified purposes, such as: experiences in tourism (Chandralal et al. 2015), female tourism (Zhang and Hitchcock 2014), food tourism (Mkono 2013), dark tourism (Podoshen 2013), tourism and migrations (Janta et al. 2011), among others. Furthermore, Mkono (2012) highlights one of the strongest points of using online ethnography, it allows researchers to access tourism experiences provided on a purely voluntary basis, that consequently provides more truthful and unbiased data.

In the context of the rising popularity of netnography, Mkono and Markwell (2014) in the paper "The application of netnography in tourism studies" summarise some facts as such: (i) netnography remains underutilised in tourism field; (ii) it is increasing in the number of publications about netnographic work; (iii) in those studies, netnography is usually triangulated with other methods; (iv) a passive netnography (*Lurker* approach) is the most popular form; (v) data are typically user-generated-content.

A brief review of tourism studies that have as central thematic tourism experiences (with emphasis on services or backpackers), confirms some points of Mkono and Markwells' (2014) study, with exception of the use of its triangulation with other methods (Table 1).

In all the studies analysed, netnography was applied based on non-participant observation, where the researchers are limited to analyse a user-generated content from blogs, webpages, reviews or discussions. Mkono and Markwell (2014)

Table 1 Application of netnography in tourism experiences/backpacker's studies

Authors	Objective	Sources	Data analysis	Mixed-methods?
Mkono (2012)	To examine how authenticity is projected onto cultural objects	The webpage marketing messages and online reviews (n = 30)	Thematic analysis	No
Mkono (2013)	To explore how tourists, negotiate existential/ experiential authenticity in cultural restaurant experiences	Post-visit online reviews (n = 30)	Thematic analysis	No
Rageh et al. (2013)	To address the question of what are the underlying dimensions that constitute the construct of customer experience	Hotel reviews (n = 85)	Content analysis with Nvivo	No
Osman et al. (2014)	To examine the multiple roles that globalised, branded spaces of hospitality can play in tourists' experiences in destinations	Online discussions (n = 14)	Thematic analysis	No
Chandralal et al. (2015)	To investigate the likely components of memorable tourism experiences (MTEs)	Blog narratives (n = 100)	Content analysis with MAXQDA10	No
Luo et al. (2015)	To present a clear picture of donkey friends' travel behaviour and reveal differences in comparison with western backpackers	Travel blogs (69 cases)	Thematic analysis with QSR's NVivo10	No
Wu et al. (2015)	To assess the characteristics and consider the implications of the emerging gap year phenomenon within China	103 blogs	Content analysis	Yes. In depth telephone interviews
Walter (2016)	To examine how tourists experience authenticity and the ethics of "hill tribe" trekking	113 TripAdvisor reviews, 10 traveler blogs, and 9 videos	Thematic analysis	No
Kolar (2017)	To explore tourist experiences with the niche-like, yet global phenomenon of escape room attractions	Reviews posted on TripAdvisor (n = 1,243)	Content analysis with Leximancer	No

Source the authors

highlights that in the tourism field, most researchers adopted a passive approach and never participated in online exchanges. This tactic is used to gain individual consent and ensure that participants interact in an uninhibited manner that is a characteristic of online communities. However, while passive observer approaches have their merits, active participation allows the researcher to probe and direct the flow and content of communicative acts online. Such an approach brings with it considerations relating to researcher disclosure and informed consent.

Concerning data analysis, the studies sustain either in thematic (in a more interpretative vein) or content analysis (in a more quantitative-pragmatic approach), that may be conducted manually or automatized. More recent studies such as Chandralal et al. (2015); Luo et al. (2015); Kolar (2017) used a variety of softwares such as Nvivo, MaxQda or Leximancer to support data analysis.

Still, different from Mkono and Markwell (2014) who state netnography as usually triangulated with other methods, when analysing tourism experience studies, only Wu et al.'s (2015) paper complemented netnographic data with in-depth interviews. This gap in the use of mixed and multi-methods approach indicates on how netnography in tourism research lacks a broader application.

Beyond paper publications, Ph.D. theses are also important sources of actual tourism research that may bring new discussions, methodologies and approaches to tourism field. In this context, Mkono and Markwell (2014) alert the existence of a number of Ph.D. theses that include netnography as part of the research process. According to the authors, "netnography is not yet regarded as a "standard" or "universally" accepted methodology, making students and supervisors reluctant of using it", mainly because there is a lack of awareness and confidence, in relation to its execution. In this regard, the present paper intends to help filling this gap by addressing theoretical and practical contributions.

3 Methodology

This study addresses the methodological limitations of a Ph.D. research aimed at exploring service experience in the context of hostels. The thesis used a mixed-methods approach based on qualitative and quantitative analyses, divided in four research phases from which netnography was a crucial part.

Netnography was considered a suitable method for the research for three main reasons. First, netnographic study can reveal much about consumer behaviour e.g. opinions, tastes, impressions, and interactions. Beyond that, netnography provides a window into the realities of consumer groups as they go about their lives. It is a powerful way to understand the changing marketplace, to gain an understanding of tomorrow's trends today, and to gain ideas and insights as valuable inputs to the front-end ideation process (Kozinets 2010).

Second, with the increasing understanding that Internet is a key tool to contemporary tourism, turned into an impermissible environment to examine tourists' behaviours and experiences. According to Rageh et al. (2013) customers usually write their reviews after their stay ends, allowing the researcher to collect a more original testimony that is less affected by their own observation and in this context netnography is the best method to examine customer experience.

Third, the target of the study is broadly known for being actively-engaged in online field. As 70 percent of total hostel travellers are in the cohort of Millennials (Hostelworld Group 2016), also known as the digital native generation, there was a need for using netnography as a tool to go further on hosteller's behaviours and perceptions related with this type of service.

For this research, observant netnography was conducted to achieve the specific goal of unveiling the key features of a positive hostel experience. Data collection was based on hostels guests' online reviews, published inHostelworld.com, the biggest Online Travel Agency (OTA) dedicated to hostels (Hostelworld Group 2017). Hostelworld digital platform, beyond booking purposes, functions as a social network allowing guests to create a personal profile, to evaluate different features of the service and comment about their experiences in the accommodation. All these information are free access.

The cases studied were five top-rated hostels in Europe and Latin America, thus, their reviews were the foundation for netnography analysis. Within those hostel reviews, two criteria guided the refinement of data selection: first, must be a positive review and second, must be written in English. In this mode, final sample was 500 online comments, 100 comments for each hostel. This sample seemed to fit the goals of the research well, for being even higher than previous and similar studies, such as in the case of Rageh et al.'s (2013).

Finally, content analysis was conducted with the support of Nvivo 11 software, where contents were quantitatively explored, using frequency analysis features and qualitatively explored, through a subjective view of guests' discourses. The phase of netnography was added to three other phases: documental analysis, participant ethnography and surveys, which together were interpreted through a triangulation of data (Fig. 1).

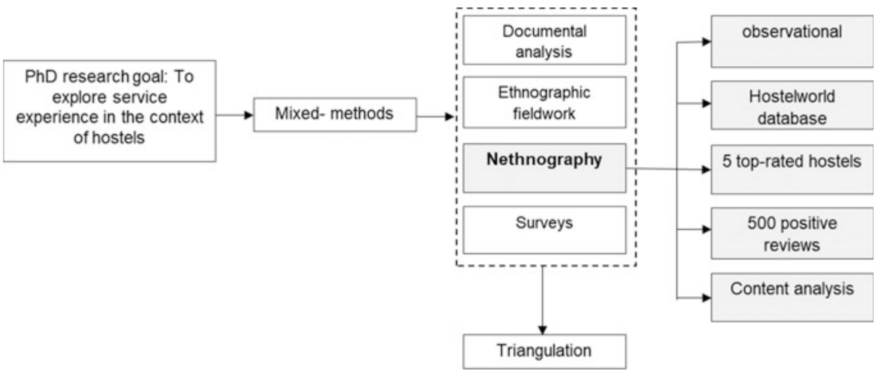

Fig. 1 Research process. *Source* the authors

4 Findings

Although there is an increasing awareness of using netnography approach in tourism, some authors refer the challenges intrinsic in this subject. Some difficulties are mentioned below:

(a) *Ethics of conducting online research*. Many researchers highlight their concern about the ethics of conducting online research. Osman et al. (2014) refer that netnography may involve the reproduction of statements without explicit consent and justify that the size and diversity of the sample meant gaining consent from each poster would have been unfeasible. In a similar case, Walter (2016, p. 218) explains: 'when researchers enter into an active on-line community as participant observers querying and directing communication, they should fully disclose their identities and motives, obtain informed consent, and conduct member checks with key informants. However, when accessing blogs or review sites as non-participant observers (much like historians doing archival research), there is no compelling need to communicate research objectives or obtain consent since these are public, sometimes anonymous Internet fora, and posts have often been made months.'
(b) *Finding reliable sources on the internet*. Mkono (2012) refers that in many websites, the authenticity of data cannot be verified, and researchers don't have access to communicate directly to the authors. Accordingly, Osman et al. (2014) believe, when researchers cannot direct responses to ensure all the dimensions of social phenomena are explored in depth, naturally occurring data can be a potential limitation of netnography. In addition, Luo et al.'s (2015) support the fact that online data might be manipulated for commercial purposes by enterprises and organisations.
(c) *Collecting demographic data.* Chandralal et al.'s (2015), for instance, did not include demographic memorable travel experiences in their study because such information wasn't available in the blog. Therefore, Luo et al. (2015) who also used online travel blogs as its data source, alert researchers about its weakness and its marketing implications to the study.
(d) *Adopting a positivist approach and generating numerical interpretation*. Although in many cases, it is possible to generate numerical interpretations of sub-themes and codings, Osman et al. (2014) stress that 'imposing a narrow positivist conceptualisation on social phenomena, based on order and measurability, is equally problematic since it represents another (equally) partial perspective on 'reality' that deliberately ignores the inherent 'messiness' of the social world.'

In accordance with previous authors, the experience of developing the Ph.D. thesis described in this article confirms some of the challenges pointed by them and addresses others. Back in 2013, before defining the research project and the methodological process, netnography was scarcely approached in tourism, what difficulted literature-based argumentation on the need for its use. However, from this understanding, internet is currently an essential environment for social interactions and the perception about netnography as an increasingly used method, considered innovative in several studies, the Ph.D. project was approved by a panel of Professors and encouraged by the supervisor on the condition that the research will be supported by other methods.

Therefore, during the Ph.D. research journey, the uncertainties confronting the recognition of the usage of netnography as a valid method by peers were replaced by the challenges of assuming it, as a suitable, but as much 'hard working' as other more 'mainstream' methods. Consequently, the mentioned Ph.D. thesis unveiled some challenges when using a netnographic approach applied to tourism studies and these are: finding online groups and reaching the right audience, dealing with the amount of data online and applying complementary methods and triangulation.

Finding online groups and reaching the right audience

Hostels are a type of accommodation that have young people as main targets more specifically Millennials, also known as the digitally native generation. In the current years, the hostel industry has been spurred by millennial travellers aged between 18 and 35 years old, especially because they valorise travelling as a key component of their lives and are spending more of their income on 'experiences' (Hostelworld 2016). They are the most educated generation ever - in terms of formal education and were born and raised through the Internet. Accordingly, they feel comfortable using ICTs and are more involved in online activities such as text messaging, social networks, podcasts, and blogs (McDonald 2015).

Therefore, as the objective of the referred research was to explore service experience in the context of hostels, online ethnography was considered suitable. Firstly, because it was known that audience to reach use to have online presence and secondly, because they use to share their travel experience in online world. It was assumed about the possibility to go further on travellers' experiences via online context.

The online environment is vast and choosing the online source is a challenge. Blogs, websites, podcasts, social networks, among others, can be options. In our case, social networks were the first option because they are a space of active interactions. Facebook groups turned into backpackers and young travellers were firstly identified and the contents posted were followed and observed. However, upon context verification, participants used to share a variety of travel experiences, but rarely about hostel stays.

As a result, new strategies were delineated. It was first considered to make observations of guests' interactions in Facebook page of elected hostels as case studies. However, as the contents were generated by the hostels themselves, most of the contents posted by guests were responses to hostels' first stimulus. The point was to give a passive approach to netnographic research and to collect spontaneous narratives of guests' experiences at hostels, then the final choice was to observe them in a platform (website) fully dedicated to it. Through the open access platform, it was possible for the researchers to collect guests reviews and also relate to guests' demographic information e.g. age, country.

Dealing with the amount of data online
The global population has increased from 2.5 to 3.7 billion from 2012 to 2017 (Domo 2017) and according to IBM Marketing Cloudy Study (2017), 90% of the data on the internet has been created since 2016. In 2016 alone, 44 billion GB data were generated per day and expected that this amount will increase to 463 GB/day in 2025 (Microfocus 2017).

In conducting research online, it is surf on a huge amount of data, making it quite challenging. For our research, there was a big amount of data available in the platform, once, a number of reviews varied between 4000 to 1000 per selected hostel. In such case, to define the 'amount' of data needed, the first step was to look for similar studies. Nowadays, when reviewing other papers, there is an interval of sample from n = 14, group discussions analysed in the case of Osman et al. (2014), to n = 1,243 reviews in the case of Kolar (2017). But back then in 2013 literature, sample size varied from 30 to 85. This discrepancy suggests that literature is still not very unclear on what extent should the sample be.

However, studies with higher number of sources are usually centred in more quantitative analysis while less numerous studies focus more on qualitative aspect, suggesting that even when applying the same methodologies, studies can track different paths. Because of that, second step was to do a reflection on the goals of the analysis, as they could be used to reveal and uncover statements, putting them into their context or could focus in reducing the original text, summarizing and categorizing.

In this respect, Bardin (2009) points a debate in academia concerning qualitative and quantitative content analysis, where information in quantitative analysis is seen through the frequency of the characteristics emerging from the content, while in qualitative, what matters is the presence or absence of a given content characteristic or a set of characteristics in each fragment of the message. If in one hand, the frequencies give more objectivity to the process, on the other hand the more qualitative approach gives a more descriptive character to content analysis. According to Bardin (2009) the main objective of content analysis is the inference and it has been increasingly common among researchers combining both indicators.

Based from this, the study was defined having a purpose to summarize and categorize quantitatively the codes, but as complementary aspect of the qualitative goal of going deeper on the nuances of experiences in the context of hostel. Additionally, it was also a concern for the researchers to select a proportional number of comments per hostel but still elected randomly. The use of software Nvivo 11 supported the organization, categorization, coding and analysis of data. This choice is in consonance with other studies that use a variety of softwares (e.g. Leximancer, Maxqda). This suggests that researchers will recur more and more to online sources due to its increasing number and improvements.

Applying complementary methods and triangulation
According to Creswell (2009) mixed methods are a viable research approach that bridge the gap between quantitative and qualitative methodologies, and are often seen as eclectic, pluralistic and rejecting traditional dualisms. As stated by Wilson

and Hollinshead (2015), a significant part of the tourism future remains inevitably seeded in the social sciences (and the humanities) of tourism and within interpretive, 'soft' ways of understanding the other, the self, and the hybrid. Additionally, qualitative methods can be and have been used successfully in positive studies while quantitative methods can be used in interpretive studies. Within this framework, the Ph.D. thesis followed a mixed-method strategy with netnography as a crucial part of research process.

Netnography is considered an innovative method (Bengry-Howell et al. 2011), and most of the authors stress that using netnography as complementation of mixed methods could be important to guarantee the validation of results and gain confidence as an approach in tourism studies. However, even with increasing literature pointing to netnography triangulation with other methods, fewer studies are actually doing it. The Ph.D. journey here described sustains in the fact that netnographic approach benefits from other methods.

Nevertheless, the doubt of what other methods could support the research was recurring. The approach was to reach for both quantitative and qualitative exploratory methods. Documental analysis and ethnographic fieldwork were needed to underlie the empirical knowledge about the object of study. Both phases, especially the ethnographic one was crucial to go deeper on hosteller's culture. Traditional ethnography has demonstrated an excellent complementary approach to netnographic phase, and although they had different goals, compare net and ethnographic data enriched the analysis. In a quantitative aspect, surveys were used to confirm netnographic analysis in which exploratory tests demonstrated to be very useful for this purpose.

But in the end of the process, the main challenge underlined was triangulation. This is mainly because each of the four phases of research generated a great amount of data relevant to be discussed as findings, thus there was a concern on how data could be systematized and better analysed to keep a lead in thesis writing. In the case of netnography, the strategy was based on remaining restricted to what was planned to achieve, all the other methods that somehow communicated and supported the netnographic phase were taken into consideration for discussions supporting a broader analysis.

5 Discussions and Conclusions

There is a growing application of netnography in tourism studies, but they are still few. For instance, between 2007 to 2017, on average, 5 studies per year were published in a scientific platform like Scopus, referring to the use of netnography in tourism studies. Although there is a general understanding and increasing awareness on the benefits of its application in social sciences, due to the relevance of the online world to contemporary society, apparently, these efforts are not enough. Therefore, the present study aligns with Mkono and Markwell (2014) statement that netnography remains underutilised in tourism field.

The same authors in the paper "The application of netnography in tourism studies" summarised that from beyond the underutilisation of netnography and the increase, even if contained, in the number of publications, netnography was used to be triangulated with other methods in tourism studies. However, a brief review in recent publications having as central thematic tourism experiences verified few studies applying mixed-methods and triangulation. In this context, this paper aimed to bridge this gap by addressing the challenges of applying netnography as part of a mixed-methods research, while reflecting on the pathways of a Ph.D. thesis.

Given this scenario, it was addressed that previous tourism publications already referred some intrinsic difficulties of netnography application in sum underlie in: the ethics of conducting online research, finding reliable sources on the internet, collecting demographic data and adopting a positivist approach and generating numerical interpretation. Complementarily, this empirical – descriptive paper identifies finding online groups and reaching the right audience, dealing with the amount of data online and applying complementary methods and triangulation are challenges that academics may need to reflect on when conducting netnographic research.

In the case described, to recur alternative online sources, use software supporting data analysis and apply suitable and complementary methods to netnography, were some strategies aligned to achieve the research goal. But it should be noted that the specificities of each research and researcher must be taken into consideration to overcome those challenges. Therefore, it is suggested that in the process, researchers can use some questions as guidelines:

- Is my target group online?
- In what type of sources (blogs, social network, etc) do they use to discuss about my subject/theme of interest?
- Will I be able to extract all the information I need from this source?
- What is the sample size of previous studies?
- Will I be able to conduct my data analysis manually or will I need to rely on the support of specific software?
- What is my purpose with the use of netnographic data? Which approach will answer my research question, one more quali-quanti or mixed-methods?

When using mixed-methods:

- What types of other methods/approaches are described in the literature as a complement to netnography?
- Which of those methods can complement/support netnography in my specific case?
- How can triangulation enrich my results?
- How my results communicate with each other and which is the thread of my findings?

Although these questions can be used as a starting point, it is known that they do not cover the complexity of what netnographic approach can do in such a vast and dynamic field as tourism. In addition, this work was limited to describe the experience of a doctoral thesis of the many that probably are yet to come. In order for this to happen, it is important for supervisors and reviewers to believe in netnography as a reliable method that contributes to the development of tourism research.

Accordingly, tourism lacks studies that picture the state of art on that issue, for instance through systematic reviews, and Ph.D. theses and papers that engage netnography as main method or as part of mixed-methods research. That being said, it is suggested that future studies are needed to explore netnography and tourism in diversified contexts and topics. Moreover, in tourism literature there is also a need for studies to focus more than on theoretical and practical difficulties, address above all, on how to overcome them in order to accomplish one of the objectives of research that can sustain and bring solutions to society.

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Chapter 42
Governance and Sustainability of Cultural Megaprojects. Case Studies from Spain

Xosé Somoza Medina

Abstract Cultural megaprojects are complexes of a number of buildings with cultural functions that have required considerable investments from public administrations. They are intended to renew the image of a city through their avant-garde architecture and to constitute a new motor for economic and tourist development. Their governance models differ, but their management structures are usually made up mostly of representatives of the public sector that has financed the mega project. In this paper, there is an analysis of three cases from Spain whose future sustainability is under political and social discussion.

Keywords Cultural megaprojects · Cultural tourism · Urban tourism · Governance · Sustainability · Spain

JEL Classification Z32 · Z33

1 Introduction

Cities are human ecosystems *par excellence*. They enshrine within their streets and neighbourhoods direct evidence for local and global history, and pass on in the daily life of the urban area the fundamental features of their local community. In their processes of change they evince desire to survive over time and to anticipate the future. They are ideal destinations for twenty-first-century tourists, just as they once were for young noblemen undertaking the Grand Tour in the seventeenth and eighteenth centuries. Contemporary society demands culture in all its forms and expressions, and from their very beginning cities have been places where culture and innovation are concentrated.

The process of urban renewal in Bilbao, with the inauguration in 1997 of the Guggenheim Museum by Frank Gehry as a key element, represented a model of

X. Somoza Medina (✉)
University of León, León, Spain
e-mail: somoza@unileon.es

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success. Many other cities have wished to follow this example, giving culture a fundamental role in the objective and subjective renovation of their urban image. In a country such as Spain, the processes of urban renewal over the last couple of decades have always had among their objectives the promotion of tourism. Moreover, this model has been repeated everywhere. There is no city of any size in Spain that in recent years has not inaugurated a new cultural building of avant-garde architectural design, with the hope that this building would become a motor driving regeneration for the entire city. Among these examples of urban renewal through large cultural projects, the cases of Valencia, Santiago de Compostela and Avilés stand out by reason of their size and impact. Valencia has a project by the architect Santiago Calatrava, Santiago by Peter Eisenman and Avilés by Óscar Niemeyer. These will be studied on the basis of the governance models in their organization and of their future sustainability.

2 Literature Review

In numerous cities, urban renewal projects have been carried out since the late twentieth century, working on obsolete sectors inherited from the past. These have included riverside docks, old canals, derelict industrial areas, and transport installations no longer in use. These projects fall within the dynamics of neo-capitalism and aim to generate new capital gains on the basis of models of urban governance in which economic power is associated with political power (Harvey 1989, Brenner and Theodore 2012). On the other hand, such urban regeneration projects have also been used by the authorities to increase the creative capacity of cities and their local populations (Florida 2004), in an attempt to turn them into cultural capitals (Johnson 2009) thanks to the creation of new buildings designed by world-renowned architects (Voase 1997; Ponzini 2014). These new cultural edifices, including museums, exhibition centres, auditoria, convention halls, and libraries, also constitute new brand images for twenty-first-century cities, the idea giving strength to urban marketing, "selling the city" with not just economic, but also social and political implications (Ashworth and Voogd 1990; Paddison 1993).

Cultural development has a direct involvement with increased tourist activity in cities (Somoza 2013). The synergies between the creation of new cultural buildings and the arrival of new tourists are evident, even if tourism is not the main reason justifying these actions for urban renewal (Law 1992; OECD 2009; González 2011). The society of today differs in the motivations of its tourists from that of a few decades ago, particularly with regard to its demands for culture and creativity (Urry 2002; Richards 2014). The tourist experience is more enriching when needs for leisure are rounded out by the acquisition of knowledge within the ever-changing consumer society of the present day (Bauman 2007). In such a context, it is of interest to analyse the models of governance set up in tourist destinations to manage what is on offer in terms of culture (Amore and Hall 2017; Queiroz 2015).

In Spain, it was the city of Bilbao that first undertook a process of neo-liberal renewal of an urban sector in decline, the former industrial areas along the banks of the River Nervión. This included a new cultural building designed by a star architect, providing a new image of the city for the twenty-first century. The Guggenheim effect has been well studied by various authors (Juaristi 1999; Plaza 2000; Vicario and Martínez 2003; González 2004; Franklin 2016). These analyses range from the virtues of an economic, political and social phenomenon to criticisms of the emphasis on the spectacular in neo-liberal culture and urban renewal. In Spain, the Guggenheim model from Bilbao has been repeated in many other places (Moix 2010; Somoza 2016), with a proliferation of new cultural buildings in cities of all sizes.

In the cases of Valencia, Santiago de Compostela and Avilés, the new cultural megaprojects are made up of numbers of buildings by the same star architect that have obliged public administrations to make considerable financial commitments, which raises doubts about their sustainability over time. In Valencia, the City of Arts and Sciences by Santiago Calatrava has required investments of more than 1300 million euro and has run up losses in the millions over the last few years of operation (Gaja 2006; Hernández and Gil 2014), even though its impact on tourism in Valencia is very striking (Salom and Pitarch 2017). Santiago de Compostela, one of the most important pilgrimage sites in Europe, started to build Peter Eisenman's project for a City of Culture in 1999. Today, after investing more than 500 million euro the Government of the Autonomous Region of Galicia, responsible for the project, has definitively abandoned the construction of two out of the six buildings envisaged by the original project (Somoza 2007; Vila 2012). Finally, Avilés, an industrial city in Asturias, was the place chosen by the Regional Government for constructing a project for a new cultural centre donated by the architect Óscar Niemeyer after he won the Prince of Asturias Award. This is a new megaproject for urban renewal aimed at reversing the tendency towards decline of this city (Sánchez et al. 2015; Benito 2016).

3 Methodology

In social sciences, the inductive method is usually used, permitting researchers to draw general conclusions from the observation of specific facts. With regard to the governance of tourist destinations and the sustainability of cultural projects, there is no general theoretical corpus, scientifically accepted and validated. All that can be found in the academic literature is case studies in which authors have established partial conclusions based on the particular details they investigated (McLennan et al. 2014; Pulido and Pulido 2014; Muñoz and Velasco 2015; Wan and Bramwell 2015; Zamfir and Razvan 2015; Flores, Jiménez and Porras 2016).

The methodology for case studies is described in various works (Yin 1994; Morra and Friedlander 2001; Noor 2008). These put forward arguments for the value of this method of research in analysing complex situations which are technically different one from another and involve many variables of interest that should be investigated. Hence, it aims at a comprehensive understanding, an extensive description and an analysis of the situation.

A case study allows partial knowledge to be gained of a given phenomenon, in this instance the governance of cultural tourism destinations. This knowledge is also affected by the subjective approach of the author in choosing the specific facts that will be studied. Within geographical sciences, the most ferocious attack on the knowledge of traditionalist schools, based on regional studies, took place in the mid-twentieth century, when Schaefer (1953) published a paper about exceptionalism in Geography. In his work, Schaefer renounced any exceptional status for Geography and advocated the establishment of general laws, even if the starting-point was knowledge of particular regions (cases), so as to achieve a scientific status similar to that of other sciences, such as mathematics or biology. A case study is a method for scientific analysis, but it should go beyond the mere description of a situation, however complex it may be, and look for conclusions that could be generalized to the remainder of possible similar cases.

This paper puts forward a case study of three examples of large urban renewal projects that have led to a significant increase in the availability of culture. They involved the construction of various cultural buildings of an avant-garde design, within a process attempting to reiterate the so-called Bilbao Guggenheim effect.

The aim of this paper is to describe, explain and analyse the governance models created for exploiting these cultural complexes and to question their sustainability from a financial, environmental and social angle. To this end, previous published works, all the existing public documentation on the management bodies and journalistic information from the local media were all reviewed.

4 Results

The three cases studied were projects promoted by the administrations of the Autonomous Regions of Valencia, of Galicia and of Asturias in the years prior to the crisis of 2008. They suffered multiple vicissitudes while they were being built, giving rise to criticisms and social mobilization against their creation. Moreover, in all three cases, between the first agreements to develop these megaprojects and the present the majorities in the regional assemblies have changed, with elections being won by parties publicly opposing the projects. These changes in government have in all cases brought with them a re-orientation in the strategies for these cultural centres, which by their size have absorbed the lion's share of the budgets of the culture boards of the respective Regional Governments: the Valencian *Generalitat*, the Galician *Xunta* and the Principality of Asturias's *Junta General*.

The results of the research show that although the three cases are similar in origin, the governance formulas used for them differ, as do their development strategies and the short- and medium-term objectives pursued. In all three cases, the size of the projects has compromised the sustainability of these cultural complexes from the very start.

Valencia. The City Of Arts And Sciences.

The City of Arts and Sciences cultural complex comprises six buildings: the Science Museum, the Oceanography Park or *Oceanogràfic*, the Hemisphereor *Hemisfèric* (holding an IMAX cinema, with the possibility of three-dimensional and astronomical projections), the Agora (a multifunctional space for various events), the Pergola or *Umbracle* (providing a botanical walk and viewing point) and the Arts Building or *Palau de les Arts* (offering theatre, dance, opera, concerts). To manage the running of this complex, in 1991 the Government of Valencia set up a Corporation for the City of Arts and Sciences (*CACSA*), subject to private law and having as its sole shareholder the Autonomous Government itself. In the Articles of Association of this commercial company, its purpose is stated to be to promote, organize and manage all the activities required to prepare, construct and inaugurate the project, and thereafter the promotion, organization and management of running activities and services to be developed, including ticket sales. It is also envisaged that it may provide consultation services and technical assistance to projects similar to those completed by the Corporation (Fig. 1).

The governing bodies of *CACSA* are three in number. First, there is the Shareholders' General Meeting, even though the only shareholder is the Autonomous Government or *Generalitat*. Next, there is a Board of Directors made up of thirteen members, with a five-year term of office (elections are every four years). In this, decisions are taken by simple majority vote and nine of the members are elected politicians from the Regional Government, two from the State universities of Valencia, one from the College of Architects and one from the Valencia

Fig. 1 Valencia. The City of Arts and Sciences (Author: Themil https://pixabay.com/en/city-arts-science-spain-valencia-905237/ Creative Commons CCO)

Tourism Foundation. Finally, there is the Executive Commission, made up of three individuals from the *Generalitat*. The Board of Directors appoints a Managing Director for the enterprise who directs *CACSA* on a day-to-day basis. The share capital with which the Corporation was founded was 319.22 million euro.

Despite the declared aims of *CACSA*, the direct management of the building receiving the largest number of tourists, the Oceanographic Park, was until 2015 in the hands of *Parques Reunidos*, a company operating world-wide in the leisure parks sector. The running losses from this were covered by contributions from the *Generalitat* over a twelve-year period. Shortly before the regional elections, a fresh arrangement was made for running the installations, and *Parques Reunidos* did not even put in a bid to keep its concession, since it did not foresee the investment could be profitable under the new conditions that ruled out direct contributions from the *Generalitat*. The contract to run the Park, and also the Agora, for the next fifteen years was awarded to *Avanqua*, a company led by the concessionaire for the supply of drinking water to the city. The other buildings for which it had been intended that management should be outsourced, the Science Museum and the Hemisphere, were not the subject of any tenders, and so continue to be run by the public administration.

The exploitation of this complex has given rise to accumulated losses of millions of euro since the inauguration of the first building, the Hemisphere, in 1998. The high operating costs of buildings make it impossible to gain any monetary profits through the sale of tickets or the leasing out of spaces for private events. The financial situation is so worrying that the auditors' report for the year 2016 determined that its deficit or negative working capital was 356 million euro. Despite the *Generalitat*'s commitment made in 1999 to finance running costs through current subsidies, the data showed the material uncertainty of any capacity on the part of *CACSA* to continue with its operations.

Santiago de Compostela. The City of Culture.

The City of Culture in Santiago de Compostela was another megaproject to build a large cultural complex, funded by the Galician Regional Government. It was supposed to achieve the Bilbao Guggenheim effect, but was much closer to the model of the Valencia City of Arts and Sciences that was being developed at that time. In this instance, an international architectural competition was held in 1999 to choose the plans for a cultural centre occupying a large area on a hill near the historic city of Santiago. It was close to the city, but completely isolated, being cut off from it by motorways and railways. Whereas in Valencia the cost overruns of the project quadrupled the initial budget, in Galicia they quintupled it, taking into account the fact that one-third of the architect Eisenman's project will never be constructed.

The initial project comprised six large buildings that were intended to create a new acropolis on Mount Gaiás, with a museum, an international art centre, a library, an archive, a theatre and an administrative building. After a change of government in 2005, the project was reconsidered and it was decided to cease all work on the two buildings not yet constructed, the theatre and the art centre, although deep excavations for the foundations of the first of these had already been completed.

A further change of government, together with continuous social criticism of the project led to the two buildings pending construction literally being buried, as they were replaced with new green areas, an outdoor auditorium and an artificial lake, set up in the foundations of what would have been the largest and most expensive building in the entire Project.

As a management body, the Public Foundation for the City of Culture (FCdC) was created in 1999. Its original Articles of Association established a Board consisting of thirteen members, plus an honorary president (a position assigned *ex officio* to the First Minister of the Regional Government). Nine members of the board were appointed by this Regional Government, the *Xunta*; the others were the Mayor of Santiago *ex officio*, plus representatives of two regional financial bodies and of a Galician energy company. Decisions had to be taken by absolute majority. The objectives of the Board were the setting up, running and promotion of areas or centres for conservation, exhibitions and cultural, communicational and technological activities. Sixteen years later, the Articles were amended, among other reasons, to allow for the purposes of the FCdC potentially to be carried out indirectly via other bodies and organizations. The composition of the Board of Trustees was barely altered, though the functions of the Manager as well as the activities that the FCdC must undertake in order to achieve its goals were described with greater precision. On these lines, a re-orientation of the original project was highlighted by the emphasis on the promotion of entrepreneurial actions and of new cultural activities, along with improvements in new technologies, physical access to the complex for the general public with leisure, nature and sports activities, and the pursuit of sustainability. The new Articles lay down as the principal goals to be pursued those activities contributing to turn the City of Culture into an economically sustainable and socially profitable project, incorporating new strategic partners, both public and private, and diversifying its sources of financing, so as to achieve sustainability for the project regardless of the economic cycle.

Despite this desire expressed by the Xunta in the new statutes, year after year, the FCdC shows a negative exploitation result. As reflected in the audits carried out, almost all of the income comes from public subsidies, around ten million a year, once the premature end of the construction works has been decreed, and the expenditure exceeds fourteen million. The complex has been underutilized since its inauguration and its offer has not yet been integrated with the rest of the cultural activities offered by the city.

Avilés. Óscar Niemeyer International Cultural Centre.

The International Cultural Centre in Avilés is the smallest in size and in budget of the three examples studied. However, its characteristics make this instance much closer to Bilbao and its Guggenheim museum, although on a smaller scale. Avilés, like Bilbao, was an industrial city that in the 1970s and 1980s underwent a deep crisis requiring reconversion, with the falling obsolescent of large urban industrial areas, especially in the environs of the estuary on which the town stands (Benito 1992).

Asturias is the headquarters of the Princess of Asturias Foundation, which since 1980 has been awarding the most prestigious prizes available in Spain. In 1989 the architect Óscar Niemeyer was awarded the prize for the Arts. In 2006, on the occasion of the twenty-fifth anniversary of these awards, he made a gift to the Foundation of a project for a cultural centre, which initially was intended to be given over to the work of all the various prize-winners. The Autonomous Government accepted this donation and chose to locate a new Museum of the Awards in Avilés, where it owned enough public land to develop the project, which would also serve as a motor driving recovery along the estuary. This choice of location was opposed by the Mayor of Gijón, the most populous city in Asturias, by the Mayor of Oviedo, the capital of the Principality of Asturias, and by the Princess of Asturias Foundation itself, based in Oviedo. This forced the first change in the project, which abandoned any link to the Awards and was renamed the Oscar Niemeyer International Cultural Centre.

The initial budget for the project was 24 million euro. It incorporated a large public square with four linked buildings: an auditorium, a viewing tower, a dome (which was to act as a museum convertible into an exhibition hall) and a multi-purpose building for cultural and tourist services. Construction began in April 2008 and the complex was inaugurated in March 2011, at a final cost of 44 million euro. However, this cost overrun was not the main problem for the Niemeyer.

In 2006, the Oscar Niemeyer International Centre Foundation was set up as a private Foundation. In it the main management body, the Board, was initially made up of four representatives from the Regional Government, two from the City Council and two from the Port Authority (dependent on the Spanish central government). At the time it was established, all three of these coincided in being controlled by the same political party, the Socialists or *PSOE*. It was possible to add further members to the Board on motions carried by simple majority. At the end of 2006, the Government of Asturias agreed to a temporary transfer of the management of the Centre's buildings to the Foundation for a period of five years ending on 14 December 2011, just nine months after the inauguration of the complex. The regional elections of May 2011 brought about a change in the composition of the Asturian assembly, with the coming into office of party, the Citizens' Forum or *FAC*, which had spoken out against the expenses that the Niemeyer Centre was imposing on the population of Asturias. In addition, the political composition of the Board in 2011 involved three different parties, *FAC*, *PSOE* and the conservative People's Party or *PP*. The number of members had been expanded at the suggestion of the Director General to include representatives of local companies and individuals related to the world of culture. In this way, it proved possible to approve successive changes in the Articles of the Foundation, expanding local control while considerably reducing the influence of the Regional Government, whose four representatives were reduced to one. An attempt was made by this Government to extend to a fifty-year term the links of the Foundation to the running of the Centre, but the new executive was unwilling to accept that arrangement and in December 2011 closed the Centre down, making a public statement that management by the Foundation had involved fraud, bringing a suit in the law courts, which a few months later caused the Foundation to file for bankruptcy. The programme for 2012 was cancelled and management temporarily passed into the hands of a regional public body.

The *FAC* government lasted under a year, because its lack of support made it impossible to gain approval for the Regional budget, so fresh elections were called. In May 2012, a First Minister from the *PSOE* took office, who agreed to transfer the buildings back to the Foundation after the Foundation took on board a Viability Plan for the period 2013 to 2022. The Articles were amended once more, returning to the original composition of the Board, with the addition of a representative from the Ministry of Culture and others from two local companies.

In financial terms, the Niemeyer Centre has generated losses since its inception, its income being limited in large part to subsidies from the Asturian Government and contributions from members of the Board. According to the audit for the 2016 financial year, the Foundation had a deficit of 1.26 million euro, and the profit and loss account showed expenses outweighing income by 853,882 euro. This was 26% worse than the previous year, when in accordance to what was envisaged by the Viability Plan the outcome was supposed to be a small profit of 52,096 euro.

5 Discussion

This paper has analysed three different models for large urban cultural projects which have undergone all sorts of difficulties since their foundation stones were laid. These have included construction-cost overruns, political and partisan controversies, rejection by the local population, and high maintenance and running expenses. This litany of problems casts doubt on their future viability.

Environmental sustainability was a part of the initial arguments in favour of the complexes in Valencia and Avilés, regenerating abandoned areas in the urban structure of the two cities. In the case of Santiago de Compostela, the impact on the landscape and environment caused by the construction of the City of Culture has been enormous and it is only since 2016 that the environmental restoration of the land located between the complex and the city has been addressed. This may serve as a new area for recreation and a connecting zone for the city's inhabitants.

The three megaprojects have generated controversy among their local populations, with complaints about the lack of integration of the centres into the local cultural fabric and their vision of culture as a mass spectacle. On these lines, political changes in the composition of the Autonomous Governments involved have led to changes in the strategies for use and cultural management in the three cases analysed. Valencia has opted for greater transparency, for increasing revenues through the temporary transfer of buildings to other bodies to hold all sorts of events, and for a stronger relationship with the other cultural centres in the city through the Valencia Tourism Foundation (Salom and Pitarch 2017). Avilésis attempting to offer more complete and diversified programming throughout the year, at the cost of giving up projects for cultural creation. Finally, in Santiago a pragmatic view has been adopted, filling the City of Culture with new technological and entrepreneurial contents.

In all three instances, the governance models put in place for management have shown a lack of transparency, accountability, effectiveness and efficiency, and a lack of participation, strategic vision, responsiveness or consensus orientation, these being principles of good governance according to the United Nations (UNDP 1997). The bodies in charge of governance have shown no interest in connecting these centres with the local socio-cultural fabric and have not been able to take advantage of synergies with the city as a whole. In Valencia, *CACSA* contracted out the running of the main tourist attractions, the Oceanographic Park, the Agora and the Arts Building. In Avilés, partisan political tensions and personal management by the first General Director brought the Niemeyer Centre Foundation to bankruptcy and into the courts accused of wilful malfeasance and misappropriation of public funds. This has led to spiralling debts hard to resolve. Finally, in the case of Santiago, the excessive weight of the Autonomous Government on the board has impeded any greater linkage with the burgeoning socio-cultural scene in Compostela whose cultural projects in the city take place far away from the buildings designed by the architect Eisenman.

Despite all these difficulties, the creation of these urban cultural megaprojects has succeeded in providing a new image for their cities. They have placed the architectural designs of the three complexes in the world spotlight, even though they have not had the expected Guggenheim effect on the rest of the city.

Finally, the different scales of the cities involved have also played a major part in the viability of, and strategies for, these megaprojects. Valencia, with 2 million inhabitants in its metropolitan area, is a large city undergoing renewal, following in the footsteps of other major European conurbations where public investments of this type have served as a pole of attraction for large private building projects that have remodelled wide urban areas. Santiago de Compostela, a regional capital with 150,000 inhabitants in the metropolitan area, also sees the arrival of 300,000 pilgrims yearly. Residents together with more tourists and pilgrims can come close to the overall population required for viability by a cultural centre of the dimensions of the City of Culture. Finally, Avilés, an Asturian city of 80,000 inhabitants, can only rely on the success of its Niemeyer Centre among the entire population in the central area of Asturias, where there are 850,000 inhabitants between the Avilés, Gijón and Oviedo conurbations, combined with a significant increase in the number of tourists arriving, possibly passengers from the ferries and cruise ships that depart from the British Isles and cross the English Channel and Bay of Biscay to reach the north coast of Spain.

6 Conclusion

The so-called Guggenheim effect sought after in Valencia, Santiago de Compostela and Avilés has not been achieved, even though large sums of public money have been invested in these cultural projects. The construction of imposing buildings is not enough to promote the economic and cultural development of a city, especially when projects are repetitive to such an extent that they lose any quality of originality. These three projects, initiated in Spain during an expansive phase of economic growth based fundamentally on the building industry, have involved a commitment by their respective Regional Governments to seek synergies between culture and tourism. The hope was that the outcome would be the same as achieved by the Basque government when in 1991 it initiated contacts with the Solomon R. Guggenheim Foundation of New York. However, in the three cases analysed the consequences for their respective cities have not been as positive.

Nevertheless, there are elements that can compensate for the negative financial effects of cost overruns in construction and high maintenance expenses. The City of Arts and Sciences in Valencia is a considerable tourist attraction. The Oceanographic Park is the attraction with most visitors and it alone sold 1.4 million tickets in 2017. The Science Museum reached almost 700 thousand entries. The media impact of Calatrava's buildings is much more difficult to gauge, but their image travels around the world continuously, as a setting for films, music videos or advertising spots. Another fact that may mitigate the economic impact of this project is the recent transfer of the headquarters of Caixa Bank, the third largest financial institution in Spain, from Barcelona to Valencia, with the opening of a new cultural centre associated with this body within the Agora scheduled for 2020. Furthermore, the pragmatic vision of the Galician Government has led to attempts to give a new orientation to the City of Culture, now based on innovation, technology and new cultural industries, in addition to projecting the whole area as a space for leisure and recreation for residents, tourists and pilgrims. User figures surpassed 700,000 in 2017. Finally, in Avilés, the strategy of promoting cruise tourism seeks to use it as a complement to more varying cultural offerings extending throughout the year that will encourage return visits from people living nearby. In Avilés, 125,000 visitors were recorded in 2017, 36% coming from Asturias itself.

The governance of the three cultural megaprojects presents many shortcomings. As they are complexes financed almost exclusively by the regional administrations, the latter are overrepresented on management bodies, with little or no representation of city councils or local society in general. The boards of *CACSA* and of the Foundations in Santiago and Avilés need to become more pluralist and seek an equilibrium in their decision structures, bringing in other administrations and the local socio-cultural fabric, so as to increase the synergies between culture and tourism, and to improve the relationship between these complexes and the local population. On these lines, the Niemeyer Centre Foundation presents a more balanced structure, although this has not proved a guarantee of better functioning. Transparency in all three of them has increased over recent years, although it is still deficient and formulae should be introduced to promote greater social participation. It is also crucial to improve the efficiency and effectiveness of these facilities, owing to the large budgets they require in a context of social awareness of public spending, just as progress should be made in the processes of accountability. Another aspect that should be improved is the linkage of these complexes with the rest of the city, both from the objective and physical viewpoint of accessibility, and from the subjective identification of the local population with these places as part of their city. Finally, these cultural megaprojects need to establish medium-term plans in which development strategies are reviewed with a greater ability to overcome possible adverse circumstances.

The environmental, social and economic sustainability of these cultural megaprojects is an open challenge. The financial difficulties of public administrations arising from the economic crisis have forced them to re-orient their strategic plans, compromising the viability of the complexes set up if private funding sources cannot be increased. Hence, different formulae have been used: concessions of buildings to external companies, an increase in the participation by other private entities in their management bodies, short-term handing-over of the complexes for all types of events, or tourist promotion campaigns to increase the flow of new visitors. With regard to environmental sustainability, this represents one of the greatest future risks, owing to the maintenance costs for the green areas and new parks created, especially in the case of Santiago de Compostela and Valencia. These are new areas for leisure and recreation that above all will need to be extensively used. That will be the best indicator of the social sustainability of these complexes, when the local populations and visitors not merely travel to them to visit an exhibition or attend a concert, but also to make habitual use of these places as a living space.

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Chapter 43
Earnings Predictability of the Greek Hospitality Industry During the Crisis

Panagiotis E. Dimitropoulos, Ourania Vrondou and Konstantinos Koronios

Abstract The aim of the present research is to explore the issue of earnings predictability of a sample of hospitality firms before and after the burst of financial crisis in the Greek economy in 2011. Earnings predictability is considered as a prominent feature of accounting quality and has several implications for investors. For this reason we utilized a sample of organizations registered on the Greek chamber of commerce during the fiscal years 2004–2007 (pre-crisis period) and 2011–2013 (post-crisis period). Those firms were operating on the hospitality and food services sectors, leading to 343 observations for analysis. Regression analysis pointed out that the cash flow component of earnings is a more significant determinant of future earnings relative to accruals. Also the persistence of the cash flow component of earnings has decreased after the burst of the crisis and this is attributed to the lower levels of earnings predictability during that period. Our study adds to the existing literature on earnings predictability and persistence of the hospitality industry, suggesting fruitful policy indications.

Keywords Hospitality industry · Food services corporations · Earnings predictability · Crisis · Greece

JEL Classification G32 · G34 · M21 · M10 · M41

1 Introduction and Theoretical Background

Earnings predictability has been considered by researchers as a significant attribute of earnings quality since according to Kang et al. (2012), financial reporting must provide useful information to investors for assessing future cash flows, making it a key attribute for financial decision making. Practically earnings predictability

P. E. Dimitropoulos (✉) · O. Vrondou · K. Koronios
Department of Sport Organization & Management,
University of Peloponnese, Sparta, Greece
e-mail: dimitrop@uop.gr

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expresses the degree that current profits may be retained in the future. This is estimated by a regression of the future value of earnings on its current value and the closer the regression coefficient is on unity (1) the higher the earnings persistence and predictability. Previous studies by Sloan (1996), Richardson et al. (2005) and Oei et al. (2008) utilizing samples of U.S. and Australian firms estimated an earnings persistence coefficient ranging from 0.609 (in Australia) to 0.84 in the US. This coefficient is interpreted as if a firm earns 1$ of earnings in year t then 0.61$ would be expected to persist in the following yeat t + 1. Consequently, revenues numbers of firms with higher earnings persistence are more predictable (those firms are associated with lower information uncertainty) and is consequently easier for investors and regulators to assess the future status of the firm and make more efficient investment decisions.

The tourism industry is sector which plays a significant role on the growth of several economies worldwide. Song et al. (2012) argue that the tourism field is among the most important economic sectors which contribute to employment and income generation in the economy, throughout the economic cycle. Especially, regarding the Greek economy, tourism is the main pillar of development presenting an important contribution to GDP growth and employment (Dimitropoulos 2018). According to a report by the Foundation for Economic and Industrial Research (IOBE 2012), in the last decade, the hospitality industry in Greece accomplished a steady growth in investments, contributing to labor and growth enhancement. Nonetheless, the plurality of Greek hospitality organizations are small-medium firms which contribute up to 15.2 billion euro on the Greece's GDP during the fiscal year 2010. The accommodation and food services businesses are the main contributors on tourism employment and GDP growth (almost the two thirds), which was calculated to be up to 741 thousand employees in 2010 (Dimitropoulos 2018). These numbers are relative to the Spanish hospitality industry where according to Parte-Esteban and Ferrer-García (2014) the contribution of the hospitality sector on the Greek GDP was 15.2% in 2012 and the majority of the sector's firms are small-medium enterprises.

The recent economic recession in Europe affected the revenue and profit generation ability of hospitality firms in several countries, mainly because the hospitality sector contains a plurality of small size enterprises, with scares resources and financing opportunities. Alonso-Almeida and Bremser (2013) document that unemployment increased and overnight stays reduced during the crisis period with significant deterioration on hospitality firms' revenues, profits and viability. The Greek economy presents another example of a recessionary European economy where the recession had a tremendous impact on employment (up to 27 per cent) and GDP growth, which impacted on the tourism and hospitality sectors as well. Nonetheless, the debt crisis in Greece remains different or idiosyncratic compared to other European countries since the current account and budgetary deficits deteriorated the economic situation of the private sector and created intense difficulties for firms. This fact created a remarkably unstable and uncertain economic environment impacted directly on the business activity and specifically on the hospitality industry (Pappas 2015; Hatzidakis 2015; Dimitropoulos 2018).

The hospitality sector in Greece is mainly comprised by accommodation and food services organizations which are highly leveraged and also face high fixed costs and reduced marginal costs. These characteristics make the profitability and sales growth of this industry very susceptible to economic cycles, demand and supply shocks, and other forms of economic vulnerability (Hua et al. 2012) thus making earnings streams less predictable than other sectors of the economy. Virtually, a limited reduction in sales can lead to a significant drop on profit margins because those types of firms have not enough room to curtail the large fixed costs so as order to absorb the potential revenue loss. This fact practically means that those limited profit margins are more prone to be turned into losses when the economy hits recession (Hua et al. 2012). A recent study by Dimitropoulos (2018) documented that Greek hospitality enterprises with higher capital intensity and leverage were less profitable during the crisis. This fact may have implications for earnings predictability. This knowledge could be proved useful to investors and stakeholders not only for allowing them to make informed business decisions, but also to assure a stable growth of this industry in Greece. Therefore, the ability to preserve a persistent profit figure is very important for investors for evaluating their decisions regarding the allocation of their capital while controlling for relevant risks.

The aim of this research is to explore the issue of earnings predictability of a sample of hospitality firms before and after the burst of financial crisis in the Greek economy in 2011. For this reason we utilized a sample of enterprises (limited liability firms and organizations) registered on the chamber of commerce during the fiscal years 2004–2007 (pre-crisis period) and 2011–2013 (post-crisis period) operating on the hospitality and food services sectors. Regression results indicated that the cash flow component of earnings is a more significant determinant of future earnings relative to accruals. Also the persistence of the cash flow component of earnings has decreased after the burst of the crisis and this attributed to the lower levels of earnings predictability during that period.

The current research subscribes significantly on the literature regarding the Greek hospitality sector on several dimensions: First of all, this is the only research exploring the predictability of earnings particularly during the crisis. Past researches on the hospitality sector of Greece have been focused on the sector's marketing policies (Pappas 2015), strategic planning activities (Gkliatis and Koufopoulos 2013), profitability determinants (Dimitropoulos 2018) and even total quality management (Bouranta et al. 2017) thereby this research fills a notable gap in the literature. Furthermore, the aforementioned researches were based on limited sample sizes and mainly qualitative data. These reasons put their results into consideration as far as bias and perceptual deformity is concerned. The current research utilizes a sample of hospitality sector enterprises (accommodation and food services firms) for a large period of time and with data extracted from corporate financial reports being audited by external auditors, thus providing a higher accuracy to the empirical results.

The following of this research is structured as: The second paragraph is focused on a review of the relevant literature and states the major research hypotheses.

The third paragraph presents the data selection process and the research design. The fourth paragraph presents the empirical results and sensitivity analysis, while the last paragraph concludes the paper.

2 Literature Review and Testable Hypotheses

A significant duty of the financial accounting information system is to signal firms' future performance to the internal and external users of the financial statements, namely the public and shareholders for exercising discipline to managerial behavior (Kang et al. 2012). Nevertheless, financial accounting throughout the world follows the accrual principle for recognizing revenues and expenses meaning that business transactions are recognized when they occur irrespective of the payment timing. This principle helps portray more effectively the firm's actual financial condition, yet it has the disadvantage of greater subjectivity on the estimation of several accounting numbers such as provisions, depreciation, inventories etc. As Richardson et al. (2005) mention, in the lack of accrual accounting the only asset or liability that would appear on a firm's balance sheet will be the cash asset amount, thus all other assets and liabilities on the balance sheet are the outcome of the accrual accounting process (Oei et al. 2008).

Under this framework, previous studies on the issue of accruals predictability and persistence have indicated that accruals are less persistent (predictable) than cash flows due to the increased subjectivity of accruals relative to cash flows. Cash flows are more tangible and easily measurable but on the contrary accruals can easily be manipulated and have less material impact on the firms' fundamentals, relative to cash flows (Sloan 1996). The lower persistence (predictability) of accruals is also attributed to their lower reliability because they require judgments for the estimation of the relative figures. This actually means that they will definitely contain error which will be corrected in accruals recorded in future periods. These types of errors could be the estimating outcome of future economic effects of current or past transactions which are measured with error (Oei et al. 2008). For example, the provision for doubtful debt will definitely contain errors since there is no certainty on the actual amount that the firm will receive or pay in the near future. (Kormendi and Lipe 1987; Kang et al. 2012).

Previous studies that examined earnings persistence and predictability in the hospitality industry document that earnings persistence (and mainly the cash flow component of earnings) is higher in this sector of the economy than on the manufacturing sector. Jeon et al. (2004) and Jeon et al. (2006) document that earnings continuity is positively related to their predictability leading to reduced systematic risk for hospitality firms. Consequently following the previous discussion, due to the measurement error in accruals it is expected that the persistence coefficient on the accrual component should be smaller (and less significant) than the persistent coefficient on the cash flow component of earnings due to less or no error on its measurement. Consequently, the first research hypothesis is stated as follows:

H1: Accruals will be less persistent than cash flows in predicting future earnings.

The current financial crisis in the European continent has been considered as an exogenous shock on the economy with severe impact on employment, financial growth and viability of firms. The lack of financing and the uncertainty created by the crisis had an impact on the quality of the financial statements of firms. Several studies documented that earnings quality deteriorated after the crisis (through higher earnings management) mainly as a response of the firms to sustain small positive profits in order to get access to the financial markets, or to avoid covenants on lending contracts or other business transactions (Kousenidis et al. 2013). Similar evidence are provided by Iatridis and Dimitras (2013) and Trombetta and Imperatore (2014) indicating that in Greece, Portugal, Spain and Italy firms reported financial numbers of lower reliability and credibility.

The hospitality industry, as mentioned above, is an economic sector characterized by enhanced sensitivity to economic cycles (increased seasonality) due to the fact that customers require discretionary income (or excess income) so as to consume the services and products provided by hospitality firms. A recent study by Parte-Esteban and Ferrer-García (2014) indicate that in Spain earnings quality, in terms of earnings persistence and predictability, decreased after the crisis. This result is attributed to several characteristics of Spanish hospitality firms such as their size (the majority of the firms are small-medium sized enterprises- SMEs), their leverage, sales volatility and cash flow volatility. The Greek hospitality firms share several common characteristics with their Spanish counterparts since according to Dimitropoulos (2018) the majority of hospitality firms in Greece are SMEs, had less operating cash flows and were highly leveraged during the crisis period. Thus, based on the above discussion we expect that earnings persistence will be deteriorated during the crisis period. Thus, we state the second research hypothesis as follows:

H2: Earnings persistence decreased during the crisis period.

3 Data Selection and Research Design

The present research uses a dataset extracted from the financial statements of a sample of enterprises which according to the Greek Corporate Law are obligated to develop individual financial statements following the Greek GAAP or IFRS. The sample period is focused during two separate sample periods, the pre-crisis period (2004–2007) and the post-crisis period (2011–2013). Financial data were collected from accommodation and food services firms since, as previously mentioned, those two types of firms comprise almost the two thirds of hospitality firms of Greece. In order to sustain uniformity and comparability within the financial data we restricted the sample only to enterprises that develop their individual financial statements at the end of the calendar year (31st of December) as in Dimitropoulos (2018). Observations with incomplete financial data on net income and operating cash flows were excluded. Furthermore, enterprises with non-available information on total assets and sales were deleted from the sample. As a result of these preconditions, the final sample consists of 343 firm-year observations available for analysis.

The reasons for the selection this particular time periods are: (a) the sovereign debt crisis had an direct impact on financing abilities of the country's hospitality firms, leading to a significant lack of liquidity. These circumstances created an environment of intense uncertainty leading to reduced capital spending, expense spending and employment, and also lead to other cash saving decisions which all reduced liquidity (Dewally et al. 2013), (b) the hospitality industry is a capital intensive sector with cyclical turnover and volatile sales and profits, thus they are very likely to be impacted by the crisis (Dimitropoulos 2018). In accordance with Dewally et al. (2013), the hospitality sector offers services that are discretionary in nature and directly connected to the level of customers' salaries and as a result the turn of the economy into a recession would certainly influence their profitability. Finally, the selection of the two sub-periods was made because we wanted to examine the effect of the crisis in isolation and when that event was in full effect. In spite of the fact that the financial crisis was busted in the US in late 2007, that crisis was materialized in Greece after 2010 (when the Greek government signed the first memorandum with IMF and the EU). So by comparing results before 2007 and after 2011 will provides us more clear inferences regarding the crisis impact by avoiding other confounding factors on the analysis.

We will measure earnings persistence by regressing the future return on assets (ROA_{t+1}) on the current return on assets (ROA_t) following the previous studies by Richardson et al. (2005) and Oei et al. (2008):

$$ROA_{it+1} = a_0 + a_1 ROA_{it} + e_{it} \tag{1}$$

Where ROA is the return on assets estimated as net income after tax divided by lagged total assets and e is the regression error term. Subscripts i and t denote the firm and the year respectively. Model (1) will be estimated by employing a panel fixed effect estimation because panel analysis contains more information with more variability and less collinearity among the variables, leading to more efficient estimates and precise parameters on model estimation. This fact allows us to detect many effects that are not detectable in the simple cross-sectional OLS data analysis. Coefficient a_1 is the earnings persistence measure and the closer would be on unity (1) the higher the earnings persistence of hospitality firms, suggesting a more stable and predictable earnings stream.

The first research hypothesis states that the accrual component of earnings will be less persistent than cash flow component of earnings in the determination of future earnings. In order to test this hypothesis we will estimate the following equation so as to capture the differential persistence of the accrual components of earnings:

$$ROA_{it+1} = \beta_0 + \beta_1 ROA_{it} + \beta_2 TACC_{it} + e_{it} \tag{2}$$

Where TACC denotes the firms total accruals estimated as the different between net income and operating cash flows divided by lagged total assets. In Eq. (2)

coefficient β_1 captures the persistence of the cash flow component of earnings while coefficient β_2 captures the differential persistence of the accrual component of earnings. If H1 is valid we will expect coefficient β_2 to be smaller in magnitude and significance relative to coefficient β_1.

Finally, in order to examine the second research hypothesis, we will include on models (1) and (2) a dummy variable (CRISIS) which will receive unity (1) for the period 2011–2013, and zero (0) otherwise and this variable will be interacted with ROA and TACC so as to capture the differential impact of the crisis on earnings persistence as presented in the following models:

$$ROA_{it+1} = a_0 + a_1 ROA_{it} + a_2 CRISIS_t + a_3 CRISIS_t * ROA_{it} + e_{it} \quad (3)$$

$$ROA_{it+1} = \beta_0 + \beta_1 ROA_{it} + \beta_2 TACC_{it} + \beta_3 CRISIS_t + \beta_4 CRISIS_t * ROA_{it} + \beta_5 CRISIS_t * TACC_{it} + e_{it} \quad (4)$$

Coefficient β_4 captures the persistence of the cash flow component of earnings during the crisis period and coefficient β_5 captures the persistence of the accrual component of earnings for the same period. If H2 is valid we expect a smaller and less significant β_4 coefficient relative to β_1 indicating a negative impact of the crisis on earnings persistence.

4 Empirical Results

Table 1 presents the descriptive statistics of the sample variables for the whole period of investigation and also during the pre and post crisis periods. Profitability (ROA) has an average price close to five per cent (0.046) indicating that Greek hospitality firms generated almost 5 cents for every euro of investment on total assets. Also, total accruals (TACC) were negative on average (−0.012) indicating that net income was less than operating cash flows for the whole period under investigation. This negative average of TACC is mainly attributed to the crisis effect since TACC were positive (0.031) before the crisis indicating that Greek hospitality firms reported more accruals on their financial statements instead of more cash-impact transactions. Moreover, average profitability (ROA) decreased significantly after the crisis (as expected) since net income comprised only 1.2 per cent of sample firms' assets instead of 7.7 per cent before the crisis.

Table 2 presents the Pearson correlation coefficients of the sample variables. Profitability (ROA) is positively correlated with accruals (TACC) a result which is expected based on the accounting standards and the principles that dictate the recognition of transaction when they materialize. The most interesting findings are the correlation coefficients of the ROA and TACC with the CRISIS dummy variable. Both coefficients are negative and highly significant suggesting that both variables deteriorated after the crisis, corroborating evidence on Table 1.

Table 1 Descriptive statistics of the sample variables

Variables	Mean	Standard deviation	Min	Max
Full sample				
ROA	0.046	0.101	−0.393	0.520
TACC	−0.012	0.162	−0.955	0.520
Pre-crisis period				
ROA	0.077	0.101	−0.150	0.520
TACC	0.031	0.143	−0.449	0.520
Post-crisis period				
ROA	0.012	0.090	−0.393	0.418
TACC	−0.058	0.167	−0.955	0.442

Table 2 Pearson correlation coefficients of sample variables

Variables	ROA	TACC	CRISIS
ROA	1		
TACC	0.523* (0.001)	1	
CRISIS	−0.319* (0.001)	−0.277* (0.001)	1

Note *p*-values are on the parentheses. *indicate statistical significance at the 1% significance level

Table 3 presents the results from the estimation of regression models (1) and (2). The regression F-stat is highly significant and the coefficient of determination (R^2 adjusted) is up to 6 per cent which is satisfactory for the number of observations on the sample, thus independent variables explain a significant level of variation on the dependent variable. As we can see earnings persistence on the Greek hospitality firms ranges from 0.23 (model 1) to 0.28 (model 2) indicating that from 1 euro of profits during the current year, 28 cents are expected to persist in the following year. However, this coefficient is far below form respective coefficients in the Korean and Spanish hospitality firms (Jeon et al. 2006; Parte-Esteban and Ferrer-García 2014). Moreover, the accrual component of earnings (TACC) yield a negative but insignificant coefficient indicating that the cash flow component of earnings is more important determinant for future earnings, consequently this finding provides support for H1.

Finally, Table 4 presents the regression results from the estimation of models (3) and (4) regarding the impact of the financial crisis on earnings persistence. As we can see, the coefficient on the interaction variable between ROA and CRISIS dummy contributed a negative and significant coefficient indicating that the cash flow component of earnings impacts negatively on future earnings after the crisis. On the contrary the coefficient on ROA (the persistence of the cash flow component of earnings before the crisis) is positive and highly significant and the coefficient is

Table 3 Regression results on earnings persistence

Variables	Coefficient	T-test	Standard error
MODEL 1			
Constant	0.034***	5.90	0.0058
ROA	0.234***	4.48	0.0523
R^2-adjusted	0.055		
F-stat	20.04***		
Observations	343		
MODEL 2			
Constant	0.031***	5.12	0.0061
ROA	0.283***	4.63	0.0612
TACC	−0.058	−1.54	0.0382
R^2-adjusted	0.062		
F-stat	11.25***		
Observations	343		
Year dummies	Included in both models		

Note **, *** indicate statistical significance at the 5% and 1% significance level respectively

Table 4 Regression results on earnings persistence and the crisis

Variables	Coefficient	T-test	Standard error
MODEL 3			
Constant	0.023***	2.57	0.0091
ROA	0.365***	5.08	0.0719
CRISIS	0.014	1.16	0.0119
ROA*CRISIS	−0.305***	−2.76	0.1107
R^2-adjusted	0.076		
F-stat	9.33***		
Observations	343		
MODEL 4			
Constant	0.021**	2.29	0.0093
ROA	0.426***	5.01	0.0850
TACC	−0.079	−1.33	0.0600
CRISIS	0.013	1.04	0.0125
ROA*CRISIS	−0.331***	−2.63	0.1260
TACC*CRISIS	0.037	0.48	0.0780
R^2-adjusted	0.083		
F-stat	6.11***		
Observations	343		
Year dummies	Included in both models		

Note **, *** indicate statistical significance at the 5% and 1% significance level respectively

Table 5 Regression results on earnings predictability and the crisis

Variables	Coefficient	T-test	Standard error
Constant	0.023***	79.01	0.0002
Earn Predict	0.007*	1.74	0.0004
R^2-adjusted	0.087		
F-stat	13.01***		
Observations	343		

Note *, *** indicate statistical significance at the 10% and 1% significance level respectively

the highest of all estimations (0.42). The coefficients on the TACC variable were statistically insignificant within conventional levels. Consequently, evidence on Table 4 provide support for H2 and indicate that the crisis reduced the quality of earnings by reducing their predictability. This finding corroborates previous evidence by Parte-Esteban and Ferrer-García (2014) in Spain.

In order to verify this argument and provide an additional robustness check on the findings on Table 4, we examined whether earnings predictability decreased after the crisis. For this reason we followed previous studies by Kousenidis et al. (2013) and Gaio (2010) and estimated earnings predictability (*EarnPredict*) as the standard deviation of residuals of model (1). EarnPredict measures the ability of earnings to be predicted in the future and thus be more persistent and have higher quality. Larger values of the standard deviation of residuals indicate less predictable earnings and vice versa. Therefore, we estimated a simple regression model were earnings predictability is the dependent variable and a dummy variable CRISIS (which designate the crisis period) acts as the independent variable. The results are presented on the Table 5. The coefficient on EarnPredic variable is positive and significant at the 10 per cent significance level suggesting that after the crisis the standard deviation of residuals of model (1) increased, designating a reduction on earnings predictability. Thus, lower earnings predictability increased the uncertainty regarding hospitality firms' future fundamentals, leading to lower persistence of earnings.

5 Conclusion

The goal of this research was to examine the earnings predictability and persistence of the Greek hospitality industry before and after the sovereign debt crisis. The analysis was based on a sample of accommodation and food services firms registered on the national corporate registry and have published annual financial statements for the whole period under investigation. The final sample considered for the analysis includes 343 firm-year observations during the pre and post crisis periods. Regression analysis results indicated that the cash flow component of earnings is a more significant determinant of future earnings relative to the accrual component of earnings. This findings verifies previous evidence by Richardson et al. (2005) and

Oei et al. (2008) in the US and Australia respectively. Moreover, hospitality firms' earnings persistence decreased after the burst of the crisis a fact that is attributed to the lower predictability of earnings and the increased economic uncertainty during that period. Our findings on the impact of the crisis corroborate previous findings by Parte-Esteban and Ferrer-García (2014) on the Spanish hospitality industry regarding the negative impact of the crisis on firms' accounting quality.

The findings of the present research can be proved beneficial for investors who use financial statements for making informed investment decisions. The fact that earnings are less predictable and persistent during the crisis could be useful for seeking other financial measures (or data) which can depict the current and future financial status of firms in a more predictable and reliable manner. Also, our findings could be proved useful for regulators and academics so as to estimate the quality of financial reporting in other related industries such as tourism or services firms, especially under a crisis and other exogenous economic or political shocks. Nevertheless, this study presents several limitations worth noticing, which at the same time provide fruitful opportunities for future research. At first, the current study is focused on a single country so the findings may be not generalizable to other country settings. Therefore, future research could enhance the current research framework to other holiday destinations and countries for verifying or rejecting the present research's inferences and results. Furthermore, the current study hadn't controlled for other possible sources of earnings persistence such as corporate governance or ownership structure. The management of an enterprise (board and ownership structure) could be another determinant of financial decisions and consequently the quality of financial statements. Therefore, future research can consider if and how corporate governance variables could be additional determinants of earnings persistence and predictability.

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