COVID-19, Technology and Marketing

Moving Forward and the New Normal

Edited by Vanessa Ratten · Park Thaichon

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"I am delighted to support the text titled *COVID-19, Technology and Marketing* as edited by Dr. Park Thaichon and A/Prof Vanessa Ratten. The text explores the changes in new digital technology as well as the challenges faced by modern marketing management through the lens of the current covid pandemic which is interesting and timely. In addition, the proposed table of contents and chapters incorporates a good balance of theory and practice, which is important to note. Finally, I believe this text would accommodate a vast readership, especially from academics and practitioners."

—Isaac Cheah, *Curtin University, Australia*

"A timely and must-read book with useful academic and practical information. The COVID-19 crisis created a whole new world and this book successfully introduces us to undiscovered aspects of this new world. Moreover, this book can be a useful compass for the future as the changes forced by COVID-19 will have permanent characteristics and significant impact on global markets and businesses."

—Nikolaos Apostolopoulos, *Neapolis University Pafos, Cyprus*

"Ratten and Thaichon's timely text explores multiple, international, perspectives on the relationship between technology and marketing within the context of the Corona pandemic. The debate surrounding the extent to which the pandemic has brought about temporary changes, or will in fact result in lasting change is ongoing. In many instances it has expedited existing trends. What is clear is the critical role technology plays in both tackling the impact of the pandemic on business, and also shaping the nature of business in the future. This is where Ratten and Thaichon's book is helpful in not only identifying challenges, but also in assessing the extent to which technology can provide solutions. It does this by drawing on theory but with implications for practice. As such it will serve as a valuable reference point for those seeking to understand the technology-business dynamic, and those keen to benefit from it."

—Andreas Walmsley, *Coventry University, United Kingdom*

"A timely, novel view, a relevance book for our times. A must read to understand how companies and individuals try to adapt and overcome obstacles, succeed or fail under what is considered by many the worst health crisis and economic downfall in modern history, with technology and marketing management during the coronavirus as their strategical foundation."

—Oscar Javier Montiel Mendez, *Universidad Autónoma de Ciudad Juárez, Mexico*

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CHAPTER 1

COVID-19, Technology and Marketing

Vanessa Ratten and Park Thaichon

1.1 Introduction

The COVID-19 pandemic has impacted society very quickly and forever changed how we perceive and use technology (Cankurtaran & Beverland, 2020). Part of the reason for this change has been the emphasis on digital communication that has enabled individuals to continue to communicate despite social distancing and lockdown requirements. The aim of this book is to focus on the technology and marketing aspects of the COVID-19 pandemic. This enables new ways of understanding societal impacts of the COVID-19 pandemic in terms of both business and economic concerns. As much of the current research and practice has focused on trying to find a vaccine or medical cure for the disease it is important that research also considers the business perspective.

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There have been a number of changes resulting from COVID-19 most of them relating to the way people live (Kraus et al., 2020). Individuals are adapting to the new conditions by altering their lifestyles. The change that has taken place is referred to as the new normal with the word new meaning that different behavioural patterns are required. This means working from home has become common with online meetings preferred (Ratten & Jones, 2020).

At the moment there is limited data available about COVID-19 that may lead to an imperfect understanding about its effect (Jamal & Budke, 2020). Some critical issues that need to be considered include the following: (1) are all consumers affected the same way by COVID-19 marketing? (2) is COVID-19 marketing dependent on context or are there different socio-demographics influencing perceptions? This book seeks to answer these questions by focusing on different issues related to COVID-19, marketing and technology. The idea for this book derived from the editor's interest in how COVID-19 was changing technology and marketing practices. We chose the title 'COVID-19, marketing and technology' to provoke interest in the topic and also to highlight the impact COVID-19 has had on society. The title emphasises that much of the disruptive change in a business setting has been from a technology and marketing perspective.

Some of the chapters in this book draw upon the existing body of research on COVID-19 that is constantly being updated. There are new research articles and reports being produced daily on the COVID-19 crisis that makes it hard to keep up to date with the changes. This book focuses on new aspects and perspectives of COVID-19 in terms of technology and marketing innovation. This means it is different to much of the existing research on COVID-19 that focuses on facts and statistics as it delves into more business practice aspects. Thereby offering a fresh view on how COVID-19 has forever changed business due to a need to embed digital marketing practices. The impact COVID-19 has had on marketing has already drawn the attention of society but from an academic standpoint there is limited existing studies on the topic (Heyden et al., 2020). This means that this book provides a timely view as to how business has changed. In addition, this book addresses the lack of research specifically on COVID-19 by providing insights into technology issues that have not been previously addressed in sufficient detail. Although the use of digital technology has skyrocketed in the COVID-19 crisis, many issues and questions remain as to how this has affected business. To date, much of the focus on COVID-19 has been on data analytics in order to understand its impact (Hall et al., 2020).

This edited collection of studies on COVID-19 is of considerable importance because of the way COVID-19 has impacted marketing and technology. There is a need for research on COVID-19 to incorporate business experiences rather than relying solely on data analytics (Alon et al., 2020). Ignoring the impact COVID-19 has had on business is without merit. The various chapters in this book highlight not only the progress in research on COVID-19 but also emerging issues that need to be addressed. This includes the positive and negative impacts of COVID-19 on business. Therefore, whilst it is important to stress the technology and marketing implications there are other issues that need more attention. This involves the social impact COVID-19 has had on society and the increased level of inequality.

This book includes original contributions that draw upon research findings. Each chapter looks at a different aspect of COVID-19 that helps to provide a coherent overview. Within each chapter a variety of scholarly disciplines are represented including economics and business, but most have an orientation towards technology and marketing. This means that the contributions in this edited book draw on different theoretical perspectives that provides a holistic overview of COVID-19.

This book presents an overview of COVID-19 as it applies to technology and marketing. The results of this book suggest three main findings: (1) technology and marketing implications need to be incorporated more into COVID-19 research, (2) marketing managers need to associate practice with societal conditions and (3) the reasons why technology is used during the COVID-19 crisis can establish new innovative practices. This chapter will examine the reason for taking a marketing and technology perspective on COVID-19. This will lead to an overview of how COVID-19 is likely to impact marketing and how marketing managers need to be prepared. A brief introduction to the role COVID-19 has played in society will be outlined through an analysis of technology and marketing practices. The main challenges related to COVID-19 are stated. By the end of this chapter, readers should be able to integrate a technology and marketing perspective into their thinking about COVID-19. This will enable them to speculate about the futureof marketing based on trend extrapolation. By doing so readers will be able to identify likely scenarios faced by marketers as they grapple with the challenges of COVID-19.

1.2 COVID-19 and Health Crises Management

COVID-19 is a health pandemic that has had significant economic, political and social ramifications (He & Harris, 2020). Crises add major challenges to society particularly health crises that impact other parts of society. This makes it difficult for decision makers from a political and business level to manage the change. Crises are dangerous due to their unforeseen nature and unknown length. Whilst most crises tend to be managed in a quick and efficient way, there are some that make it difficult for all parts of society to adapt. The current COVID-19 crises has resulted in human and economic losses on a scale not seen before (Kirk & Rifkin, 2020). This has resulted in an urgent need to derive new innovative solutions to the change (Roper & Turner, 2020). As crises present a form of disruption some members of society handle the change better than others. This has led to an inequality gap between rich and poor members of society. Those individuals and entities with stored resources in the form of finance or capital can utilise them in times of crises. This provides a safety net that helps them deal with market uncertainty. For those less fortunate and without savings it can be difficult to adjust to new market conditions. In addition, as the role of the government has been outsourced in many societies it further fuels the inequality gap.

Throughout history there have been crises of varying nature including wars and natural disasters. Health crises previously tended to be geographically focused. The COVID-19 pandemic has affected some industries more than others (Salamzadeh & Dana, 2020). The hospitality industry has been significantly negatively affected whilst the online retail industry has been positively affected. The hospitality industry has had to shut down a large proportion of its operation due to social distancing and hygiene requirements. The previous continued growth in hospitality stopped with the COVID-19 pandemic. Whilst some economies have reopened their hospitality providers, the catch up effect is still yet to be seen. This is due to the lost revenues and decreased customer patronage. Given the new rules regarding space restrictions and cleaning, the hospitality industry has had to implement major changes. This has affected their profitability and desirability by consumers in the marketplace. With the need for take away instead of in-house dining experiences during the COVID-19 pandemic the impact of these changes is still yet to be felt. Customers are more hesitant and worried about hospitality services. In addition, unlike products that can be brought and consumed later, services cannot be consumed at a later date. This means the possibility of catching up by purchasing unused services is not possible. Although pent up demand is likely to see an increase in the consumption rate of services. To survive a crisis of this magnitude government aid is required (Ansell & Boin, 2019). This will enable established businesses to resume their services. To cope with the crisis stations, businesses can increase their marketing efforts (Wenzel et al., 2020).

The global spread of COVID-19 requires governments to take urgent steps in order to prevent further mayhem (Cortez & Johnston, 2020). The steps taken resulted in closure of businesses, schools and facilities in order to decrease the amount of social interaction in society. As the main strategy to stop the spread of COVID-19 is through social distancing, this resulted in major changes to society (Chesbrough, 2020). Due to the lack of medical cures or treatments for COVID-19, non-medical interventions in the form of physical separation from others was preferred (Bacq et al., 2020). This is a change to previous social conduct that emphasised close physical interaction. In the digital era, communication can take place via computing devices but it is not the same as physical contact. The crisis has necessitated the need to find a vaccine or cure for COVID-19. Second and third waves of infection have further extended the need to find both medical and non-medical solutions.

In order for society to recover and rebuild new marketing, technology and entrepreneurship techniques are needed. This will help to mitigate the damage caused by COVID-19. The concept of a crisis is related to an extreme event that is normally unpredictable (Doern et al., 2019). This means a crisis is defined by an event that cannot be explained by normal environmental conditions. This leads to confusion as to how to respond based on current market information. The COVID-19 crisis is different to previous crises as it is still unfolding and has not been fixed. This prolonged nature means there is still uncertainty as to its effect on society.

Unlike previous crises that were limited to a geographic location the COVID-19 crisis has been felt around the world (World Health Organisation, 2020). Developed and developing countries have been affected at the same rate. This unusual position means that developed countries in some cases have had to ask developing countries for help. The quick spread of COVID-19 meant that many businesses were unprepared and did not have time to respond in a proper way. This has resulted in some businesses not having the liquidity to continue their operations due to changing consumer demands.

The economic impact of the COVID-19 has caused many problems for society due also impacted daily life activities. This is due to the isolation caused by social distancing requirements. As a result, there has also been an increase in mental health initiatives in order to decrease anxiety and depression rates. The stress of the COVID-19 pandemic has fractured society and caused unrepairable harm. The prolonged nature of COVID-19 has caused significant side effects in individuals not getting treated for other diseases. The loss of social interaction due to COVID-19 has caused psychological distress in many individuals.

Entrepreneurs are needed in times of crisis as they provide fresh ideas and insights. This enables opportunities to be pursued and innovation to increase. In times of a crisis it is necessary to develop entrepreneurial competencies in society (Williams et al., 2017). This enables qualities such as resilience to be developed. The term 'resilience' has been described as a buzzword due to its popularity in describing behaviour required in times of crisis (Weick & Sutcliffe, 2011). Resilience is associated with the ability of being able to respond to hardship in a positive way. This form of behaviour is needed in crises that involve substantial alterations to daily life. Being able to respond proactively and in a constructive manner is important. Media outlets and politicians have referred to resilience as a personality characteristic needed during the COVID-19 pandemic.

1.3 Marketing Relationships

One of the biggest changes from the COVID-19 crisis has been the rapid growth of online platforms for communication. This has modified the nature of human activities and enabled real world social relationships to exist in an online format. Advertising is crucial for businesses and embraced as a way of building brand awareness. The increase in digital technology has altered the way businesses advertise. This has meant a move towards digital and social media for marketing communications. Unlike large businesses, small businesses view advertising as an expense rather than a necessity. This is due to a reliance often on a small geographic location and repeat customers. Large businesses on the other hand can focus on international markets and access different types of customers. This is changing with more small businesses becoming aware of the need for advertising as a revenue and awareness generator. In addition, new marketing techniques offered through social media are made available.

Commitment in marketing relationships is important as it enables a better understanding of mutual dependence. The main facets of commitment are affective, continuance and normative (Allen & Meyer, 1990). Affective commitment is defined as 'an emotion-based predisposition to maintain and enhance a relationship' (Viswanathan et al., 2010, 3). This means emotions and psychological connections play an important role in maintaining relationships. Sometimes the emotions might be easy to see in terms of being happy or pleased with the interaction. However, often the emotions are included in more nuanced behaviour that are hard to identify. Whether the emotion is easy or hard to see does not matter as it still plays a big part in the active maintenance of a relationships. This is due to some people not being able to explain their emotions with the emotions being more evident in behaviour.

Continuance commitment is defined as 'exchanges and side bets that create interdependencies between parties over time' (Viswanathan et al., 2010, 3). This means over time partners in a relationship act in a way to solidify the partnership. By focusing on mutual needs the relationship is continued. Exchanges may favour the continued interaction between partners due to the time and resources invested in the relationship. Therefore, there are bonding mechanisms in play that make it easier for the partners to stay connected rather than separating. Trust and solidarity are important components of this relationship and enable the partners to overcome potential obstacles. Loyalty is also part of this relationship as it enables the relationship partners to favour each other in market transactions.

Normative commitment is defined as occurring when 'prescription for how community members should behave toward one another are enforced' (Viswanathan et al., 2010, 3). This means there are expectations about how partners should behave in a relationship. These expectations might relate to industry standards about interactions in relationships. Relationships management is a key part of any good relationship so it is important that parties in and outside a relationship approve the behaviour and to minimise risk from COVID-19 related complications.

1.4 COVID-19 and Risk

Although the symptomatology of COVID-19 is established, there still is a lack of medical cure. The concept of risk refers to some kind of potential damage arising from an action. The occurrence of this damage can vary depending on its impact. Risk has a subjective component as it relies on an individual evaluating whether it is likely to occur. In a health situation risk is assessed based on an individual's perception about its occurrence and its consequence on behaviour. This means assessing the level of risk from a health event can be complex particularly if the health issue is a new occurrence. The perception of risk regarding COVID-19 is based on the possibility of it causing damage and the uncertainty of the result. In the context of COVID-19, risk is different depending on one's age and gender. The vulnerability and severity of COVID-19 seems to be correlated with age and gender. This means older adults particularly those 70 years and above are more susceptible to a serious outcome from contracting the disease. In addition, males compared to females appear to be more susceptible to the disease. However, due to the new and ongoing nature of the disease there still is much medical research being conducted on how the disease affects different socio-demographic groups.

The COVID-19 crisis is a sharp shock as it occurred very quickly and has had a big impact on society. It has caused economic changes in terms of how individuals purchase and consume goods but also resulted in a reduced turnover for some businesses. Due to financial changes businesses have had to make rapid decisions about how to spend and save money. The crisis effects on marketing vary strongly between sectors with the tourism and hospitality industry being especially affected. Regions that have had lower rates of COVID-19 infections will most likely to be able to rebound more quickly. Thus, it is useful to reflect on how the COVID-19 crisis has and will affect marketing initiatives. There is a need for more e-commerce assistance for small business as a result of COVID-19 making them sell goods and services online. Online shopping has boomed during the COVID-19 crisis but many small businesses lack the capacity to set up a digital platform. Help in the form of government grants is needed to accelerate the digital transformation of small business. This can help small business elevate their existing online presence by teaching them social media techniques. The digitalisation knowledge will enable small business ownersto connect with customers and suppliers via digital platforms. At the moment small businesses that fail to have their products online are suffering commercial loss. This is also restricting their customer base.

The COVID-19 crisis is still evolving but its speed in affecting the global community has surprised many people. Previous coronaviruses such as the Avian flu were restricted to specific geographic locations but COVID-19 has spread rapidly around the world. Due to their knowledge about how to handle previous coronaviruses some countries have had more success in limiting the number of people infected with COVID-19. Coronaviruses are a large family of viruses that cause respiratory illnesses. The global scientific community is frantically searching for a medical intervention that can stop the spread of COVID-19. Face masks have become mandatory in many countries as a way to stop the transmission of COVID-19. As COVID-19 is spread through saliva droplets face masks offer a relatively cheap and easy way to limit the number of new infections. People without symptoms are a major source of COVID-19 transmission so it helps if they wear masks. These individuals are asymptomatic individuals and do not know they are carrying the virus. Masks and prevention measures to stop spreading the virus. Cloth masks and disposable masks are worn by many individuals with health care professionals tending to wear the N95 masks that filter 95% of air particles. Many countries require people to wear masks and have guidelines regarding their usage. Mask wearing is viewed as one of the most effective ways to minimise the spread of COVID-19. Making masks mandatory during the early phases of the COVID-19 outbreak has led to lower transmission rates. This has meant wearing masks is considered the new normal. Mask wearing is a preventive measure that is low cost. Some governments have offered free masks to citizens whilst others have encourage the use of handmade cloth masks.

The threat of COVID-19 was underestimated by some governments causing them to be unprepared. The time it took for governments to act on advice about the danger of COVID-19 is a factor in minimising its spread. The economic consequences of the COVID-19 pandemic are derived from the public health responses taken to confront the crisis. Initially the shortage of personal protective equipment and masks led to an increase in the spread of the virus. An unhealthy over dependence on imports for masks caused further harm. COVID-19 as an infectious disease is important to understanding societal development. In the past economic and war forms of crises have received more attention. This is likely to change given the impact COVID-19 has had on the global economy.

Resilience is a concept used to understand exogenous shocks such as crises. Castro and Zermeno (2020, 12) states 'the concept of resilience comes from the Latin word resiliere, meaning to bounce'. Crises can be viewed as assemblages of multiple interactive occurrences that change society. In a crisis, entities rely on each other in their attempts to remedy the situation. In other words, the crisis makes people and business aware of their mutual dependence. A crisis needs to be solved by entities working together in a strategic manner so it is important that collaboration is meaningfully encouraged. Consequently, individuals must understand the dynamics of a crisis and the variety of independent roles such as organiser, spectator and problem solver. Research to date agrees that crises cause people to act in different ways. Crisis management studies show that entrepreneurship provides much needed solutions in times of crisis. However, we are yet to fully understand how and why entrepreneurship occurs through value co-creation activities.

Crisis marketing provides firms with an opportunity to use marketing to build relationships with customers, communities and other stakeholders. Firms can choose to view crisis marketing as simply another communications channel through which they can disseminate information. This defender of information approach suggests that whilst marketing can create value it does not take advantage of the opportunities provided through real time information. As propagated by modern relationship marketing techniques, marketing relationships require a network of customers, suppliers and other stakeholders. Therefore, the role of crisis marketing may need to be redefined during a crisis. Stakeholders can manipulate crises marketing through emphasising certain outcomes. This means care needs to be taken in contemplating the trade-offs between a crisis marketing culture that is conservative versus a more modern approach. Conservative crisis marketing emphasises the important role of keeping the status quo in terms of brand image. On the other hand, modern crisis marketing takes a more progressive view in terms of connecting with consumers desire to feel empathy during a crisis. Thus, it is important to shed light on the complex nature of crisis marketing that is difficult in practice to manage. This means cross-functional collaborations might be required in crisis marketing in order to navigate this area. Considerable diversity exists between formal statistical data about COVID-19 and the research evidence about societal impacts. This may be due to a time lag between the crisis occurring and businesses reporting how they have been impacted. The existing literature presents no consensus on how to solve the COVID-19 crisis or the crisis management process. Solutions have focused on real time approaches with cross-culturally comparing the impact. Research on COVID-19 and marketing has attracted considerable interest but has rarely been evaluated and explored in the technology innovation research arena. In evaluating the COVID-19 crisis, this chapter considers the role marketing plays. It argues that an increased awareness and integration of marketing into COVID-19 studies creates additional value for society through entrepreneurial action.

1.5 COVID-19 and Entrepreneurship

COVID-19 entrepreneurship is a new and significant stream of research. Accordingly, scholars and practitioners are increasingly assessing how entrepreneurs have changed as a result of the COVID-19 crisis. Entrepreneurship in times of crisis has a positive effect on community development (Viswanathan et al., 2014). Nonetheless, the research on this topic is sparse and lacks a proper systemization. Kirby (2004, 511) defines an entrepreneur as 'someone who undertakes to make things happen, and does'. This means an entrepreneur is a change agent and provides necessary innovation to progress society. Entrepreneurs are involved in entrepreneurship, which is the process of making things happen. Timmons (1989, 1) defined entrepreneurship as 'the ability to create and build something from practically nothing. It is initiating, doing, achieving, and building an enterprise or organisation, rather than just watching, analysing or describing one'. This means that entrepreneurs emphasise action that results in change. Not all entrepreneurs are the same as they differ in the speed and rate of business development.

Kirby (2004) suggests that the main characteristics of entrepreneurs are a risk taking ability, need for achievement, locus of control, desire for autonomy, deviancy, creativity, opportunism and intuition. Entrepreneurship is associated with the commercialisation and generalisation of new relevant innovations. It also has a social role in creating new jobs and stimulating economic growth. This leads to social benefit for communities living around the business. In the case of for-profit entrepreneurial ventures there are spillover effects in the form of new attention from others with regard to the business activity. This creates social value and can influence the creation of non-profit entrepreneurial ventures. Accordingly, entrepreneurship has both an economic and social impact. COVID-19 entrepreneurship has an extremely relevant social impact in terms of generating social value. This means COVID-19 entrepreneurs are instrumental game changers for society and give hope to communities. Consequently, COVID-19 entrepreneurship can be used to describe intention venues ventures that include some kind of societal effect (Ratten, 2020c). This means using entrepreneurship as a way to exert a positive influence on society. Thereby facilitating the socialisation of communities through business ventures. The connections made possible through entrepreneurship can foster information exchange and new projects. As the COVID-19 environment represents a new market context business ventures are created to fill market needs. The resulting social value may be created by the COVID-19 related entrepreneurial ventures that emerge during the crisis.

Entrepreneurship involves generating new ideas that add value to society (Ratten, 2014). The concept of entrepreneurship is synonymous with change and innovation. This is because in order to develop new products and services there needs to be an alteration to the status quo. Being resilient is a trait entrepreneurs share and sets them apart from non-entrepreneurs (Marques et al., 2019). In order to address problems caused by crisis situations, a resilient attitude needs to be adopted. This will enable individuals to overcome blockages that prevent them from being successful in implementing change. In order to combat the new way of living due to COVID-19 a resilient attitude is needed (Kuckertz et al., 2020). Entrepreneurs find opportunities in the marketplace that have previously been overlooked. To do this requires resilience in order to pursue market gaps. Entrepreneurs often suffer from stress that causes psychological damage so they need to be resilient (Jones et al., 2018). Being resilient implies a high level of adaptability, which is useful in turbulent situations. Crises can involve constantly changing conditions that make it difficult to make the right decisions. This means entrepreneurs who have a resilient attitude can adapt to change quickly. Resilient entrepreneurs tend to show more tolerance from ambiguity and uncertainty. This helps make them best decisions in crisis situations. In order to adapt to diverse circumstances, entrepreneurs need to learn.

It is possible to outline the main characteristics of COVID-19 entrepreneurs that distinguish them from non-entrepreneurs. Such characteristics are fundamental to building a comprehensive understanding about the nature and personality of a COVID-19 entrepreneur. In detail, COVID-19 entrepreneurs are individuals that make advantage of a crisis in order to introduce innovations into the marketplace (Jeyanathan et al., 2020). This means a COVID-19 entrepreneur is likely to be resilient and adaptive to market change. Not all entrepreneurs are able to respond in a positive way during a crisis due to the associated change in psychological state. This means that COVID-19 entrepreneurs are ablet to proactively engage in business activities in times of hardship. This distinguished them from normal entrepreneurs who also are passionate but rely on stable market conditions. COVID-19 entrepreneurs have a mindsetthat enables them to flourish in times of crisis and to take initiative (Donthu & Gustafsson, 2020). This helps them to identify and source opportunities before other individuals. The ability to forecast market trends is a key feature of COVID-19 entrepreneurs and enables them to navigate the market in a more strategic way. Expertise and willingness to engage in business also helps COVID-19 entrepreneurs.

There are several relevant insights emerging from the development of entrepreneurship due to COVID-19. Firstly, COVID-19 entrepreneurship is related to the willingness to help society in times of need. This means the practising of entrepreneurship is dependent on the passion of an entrepreneur to make a difference to society. Whether this is due to an altruistic need or want for capital gains is debatable. However, there is a change in behaviour in all entrepreneurs in a crisis regardless of their motivation for economic activity. Secondly, the emergence of COVID-19 entrepreneurship needs to be examined in relation to external factors that help or hinder entrepreneurship. Increasingly government initiatives are being used as a way to spark interest in COVID-19 entrepreneurship. This means entrepreneurial opportunities may be built based on the assumption of government funds. This means there needs to be a better understanding about how policies can be used to facilitate COVID-19 entrepreneurship. By doing so it will open up doors to new possibilities. Thirdly, COVID-19 entrepreneurship has a social and societal effect.

1.6 Contributions of Book to Research Development

The contributions of this book expand our knowledge on disasters and crisis management. It is hoped that this book will be useful to both practitioners and scholars with an interest in COVID-19 marketing and technology but also those in crisis management and international business. We hope that this book will prompt further research into the topic of COVID-19 both in terms of its impact on technology but also usefulness in providing impetus for further innovation. It is expected that COVID-19 research will evolve from a peripheral area of study into a recognised stream of research. This is due to the continuing nature of COVID-19 but also the distinct business opportunities it presents. Historically, crisis research has been studied in entrepreneurship but more as a side issue rather than as a recognised field. This will change the way COVID-19 has significantly changed society. No longer are crises inconsequential or frivolous as the COVID-19 crisis has shown how much they can change business practices.

The sustained progression of COVID-19 marketing, technology and entrepreneurship research as a field of study depends on the continuity of research scholarship. New research needs to be mindful of potential new pandemics or crises and historical patterns. This will enable broader research streams to emerge that connect COVID-19 scholarship to other areas. In accumulating knowledge future research should show the implications of COVID-19 for emergency and risk management practices. This can enable research to inform practice about crises through trends.

All marketers face some type of uncertainty, but the COVID-19 crisis has led to higher levels of uncertainty. This has been a challenge for marketers and entrepreneurs who need to balance the risk versus rewards for business activity. There has been a reduction in the level of government interaction in society and an emphasis on individual responsibility. This has led to more interest in entrepreneurship due to the way it focuses on self-reliance. The term entrepreneur is often associated with small business due to the focus on self-employment. Whilst not all entrepreneurs are involved in small business, the majority are either directly or indirectly influenced by small business activity.

There has always been an interest in entrepreneurship but more recently it has increased due to the way entrepreneurs are perceived as contributing to society. Entrepreneurs contribute to job creation, which influences other sectors of the economy. In addition, entrepreneurs adjust and/or realign current industry conditions to emerging trends. This helps to contribute to societal wellbeing. Entrepreneurs can be differentiated from non-entrepreneurs due to their determination and perseverance. These personality traits mean that entrepreneurs are orientated towards taking initiative by having a sense of personal responsibility.

1.7 Contribution to Literature on COVID-19, Technology and Marketing

This book contributes to the literature on COVID-19 in three main ways. Firstly, by providing a link between technology and marketing. This is important due to the way COVID-19 has altered society. Social distancing requirements have meant an increased number of individuals are communicating via technological devices. This has enabled individuals to stay in touch with others through digital means. Real time communication is important in the business world so increasingly technological innovations that facilitate this have become important. Due to the prolonged nature of COVID-19 it has been important for consumers and businesses to utilise technology also for marketing reasons. Novel and innovative marketing campaigns have emerged during the COVID-19 crisis. This has provided a sense of entertainment but also facilitated solidarity in society. Digital marketing campaigns have become popular especially ones that are interactive.

Secondly, the chapters collectively help to build a theory of business practice based on the COVID-19 environment. Currently there is no common theoretical framework utilised to understand the effects of COVID-19. This means existing theories developed in other contexts have been used. Whilst in the short term this might be the best approach, in the long term theoretic that take into account changes apparent in the new environment are needed. This would allow us to utilise specific theories to test and compare data. Although existing theories such as the knowledge spillover theory of entrepreneurship can be extended to take into account the COVID-19 context.

Thirdly, we contribute to practice by extrapolating data and research to a real life context. Research on COVID-19 can be utilised to help and inform marketing managers that need to reach new customers. Thus, the suggestions provided in the chapters of this book provide a source of new knowledge. As this chapter discussed, topics such as disaster management in the context of the COVID-19 pandemic need to be further explored. This will enable a better look at challenges from different perspectives. This means that special attention is drawn to how COVID-19 has impacted business activities due to the way COVID-19 is a protracted public health crisis that is affecting the international business environment.

1.8 Implications for Practice

Researching the link between COVID-19, marketing and technology makes a significant contribution to practice. Attitudes towards the COVID-19 crisis reflect, to a large extent, subjective perceptions rather than objective conditions. This means regardless of the reality, a strong dependency exists between an individual's fear of the crisis and opportunity perceptions. In fact, perception and hysteria regarding COVID-19 is considered normal especially by those with first hand knowledge about the crisis. Regardless of the current situation, there seems to be a continual sense of uncertainty surrounding the COVID-19 pandemic.

Clearly the reality might differ to these perceptions based on the environmental context. The distortion in perceptions is common in individuals and particularly those facing extreme hardship. This of course does not mean that individuals in times of crisis make wrong or irrational choices as rathe they decide on actions that work best for them. An individual may perceptive their condition as being suitable given the conditions of others and as a result be more positive.

There are different ways marketers can analyse the effectiveness of campaigns. This includes via predictive analysis that seeks to understand the impact marketing has on behaviour. Part of this process might involve looking at sentiments received from marketing communications. This information can help determine the successfulness of different marketing messages.

1.9 Conclusion

The year 2020 will always be remembered for the way COVID-19 impacted society (Ratten, 2020a). The change happened quickly and without much warning. Although there have been previous health crises, the COVID-19 crisis has had a global effect. The initial first wave of infections occurred in March 2020 with the second wave of infections occurring in November 2020 (Ratten, 2020b). Whether there will be a third wave or subsequent wave of infections is still unknown. In November 2020, Pfizer announced good results from their stage three trial of their potential vaccine. As a result, there has been excitement around a potential solution to a global crisis. Whether this vaccine eventuates is still unknown at the time of writing this chapter but governments around the world have been planning on how to disseminate the potential vaccine. This includes giving the vaccine first to older adults and those with pre-existing health conditions who are more susceptible to the virus.

The chapters in this book advance growing interest in the relationship between COVID-19, technology and marketing. In bringing together contemporary issues on COVID-19, we seek to address questions such as what does the COVID-19 crisis mean for marketing? How does COVID-19 research inform our understanding of marketing in times of crisis? Does a crisis influence the rate of technology innovation? And can marketing and technology research offer a new perspective on the COVID-19 crisis? A vibrant research stream in the COVID-19 literature has been focusing on technology as a means to promote innovative behaviours. The overarching question of this literature is to what extent and under what circumstances does technology impact crisis management. This involves using technology for entrepreneurial learning and the development of new knowledge and skills. In this respect, this chapter explores future research potential on COVID-19 that has currently been overlooked. More specifically, this chapter shows that the association between COVID-19, marketing and technology can be better understood through an entrepreneurial lens. This involves unpacking the way the COVID-19 crisis has accelerated the use of technological innovation. In particular, it finds that technology has had a positive impact on society. Technology augments marketing efforts during the COVID-19 crisis by enabling messages to be disseminated through digital means. This chapter also disentangles the mechanisms through which technology has helped solve problems created by the COVID-19 crisis.

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CHAPTER 2

COVID in the Aviation Industry: Crisis Management, Its Decisions and Outcomes

Patamaporn Thaichon

2.1 Introduction

COVID19 or Corona Virus Disease 2019 is a respiratory virus disease from the new strain of the Coronavirus which originated from China, Wuhan in 2019 (WHO, 2020a). Some well-known strains of the Coronaviruses in history are for example tons of Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) (WHO, 2020b). The most common symptoms of the COVID19 are dry cough, high fever and tiredness (WHO, 2020b). Some cases of patients also include aches and pains, nasal congestion, headache, conjunctivitis, sore throat, diarrhea, loss of taste or smell or a rash on skin or discolouration of fingers or toes (WHO, 2020b). Around 80% of patients can recover from the virus without any needing for hospital treatment but unfortunately the other 20% tend to develop into serious illness and difficulty breathing (WHO, 2020b).

On the one hand, from China the virus rapidly continues to spread to every part of the world through people transportation, until 11

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March 2020, World Health Organization (WHO) officially announced COVID19 as the world pandemic (WHO, 2020a). By the time of 20 September 2020, there were 30,991,301 cases of COVID19 and there were 961,461 reported deaths (Worldometer, 2020). However, the latest research from the scientist lap reported that COVID19 has been mutating since the original strain from Wuhan (Banerjee et al., 2020).

On the other hand, the countries which heavily depend on international trade and tourism, for example; Thailand, received a severe impact from COVID19 (WorldBank, 2020). The huge chunk of 15% of Thailand GDP is from tourism (WorldBank, 2020). The COVID19 outbreak will lead to many job losses, especially in the tourism sector due to social distancing and lockdown restriction. Moreover, the contraction of the world economy hit most country very hard on their export and tourism due to lower global demand. For instance, the World Bank predicted Thai's economy in 2020 contract by 5%, which is among the largest declines in East Asia and the Pacific region (WorldBank, 2020). Thai's economy is predicted to recovery to the pre-COVID state in the next 2 years or by 2022 (WorldBank, 2020).

Besides, the faster and the larger group of the population moving around, the better the outbreak spreads (Marsden, 2003). Therefore, to counter the pandemic each country came up with their plan. Yet, most countries agreed that efficient method is to lockdown the infected area or lockdown the country from outside (Lau et al., 2020). The main purpose is to slow the spreading within each country until the virus disappears from the human-self immunity or until the vaccine has developed (Boyle, 2020). Nevertheless, the most popular method of human transportation is aviation due to the time saving per distance coverage. However, the aviation industry has been the very first to get hit by the impact of the virus situation with almost no international and domestic travel by air in most countries around the world (Nhamo et al., 2020). Then, the industry also gets hit by the following wave of slow economic disaster (Nhamo et al., 2020). Hence, the industry needs to adapt to change within the pandemic era to survive until the end of the outbreak.

2.2 Overview of the Aviation Industry Before and During the COVID19

The downfall of the aviation industry has begun in early 2019. Even before the first occurrence of COVID19 due to the world economic recession, higher price of jet fuel, trade war problem between the USA and China, and higher competition within the aviation industry itself (KPMG, 2019). Many of the airlines and aircraft manufacturer company such as Airbus and Boeing faced financial difficulty even before the COVID19 (IATA, 2019).

In 2019, both major aircraft manufacturers; Airbus and Boeing, received the total sum of 1377 aircraft orders from all airlines around the world, which fell from 1921 orders in 2018 (Statista, 2020). To narrow down those number, Boeing received only 246 aircraft orders in 2019, comparing to 2018 Boeing received 1090 aircraft orders which are around 80% declined (Statista, 2020). After COVID19 first stuck in China in the fourth quarter of 2019, the very first case of COVID19 reported on 17 November 2019 (WHO, 2020a, b). Most of the government around the world began to lockdown their own country or at less not permit the entry flight from the highly infected report country. This made the aviation travelling is impossible to fly cross international, except in some rare cases such as military flights, cargo flights and return of the expat flights (CAAT, 2020).

Moreover, after COVID19 continue spreading out into the rest of the world such as the USA and India, and at the same time, WHO has announced the overall virus situation as world pandemic (WHO, 2020a). People began to panic to stock up goods, promote social distancing, and limited travelling (Eastman, 2020). Furthermore, in an attempt to stop and slow down the virus, many governments, such as Thailand, New Zealand and Australia prohibit people to leave outside their home (Worldometer, 2020). Together with the work-from-home concept, using technology video conferencing and without the need for travelling. Therefore, the demand for air travelling has dropped to a minimum (ICAO, 2020). With these difficulties, most airlines around the world are facing negative income and impossible to survive without adapt to the situation (ICAO, 2020).

Luckily some airlines can still operate with the short route within the domestic. Although some huge international airlines which are mainly operating in the international market need to temporary stop operate within the lockdown period. According to the International Air Transport Association or IATA (2020), the COVID19 outbreak will drag down the aviation industry down to be the worst year in the aviation industry. Commercial air transportation will not recover to the year before the outbreak until 2024 (IATA, 2020).

Each local aviation authority came out with a new standard to cope with and prevent the COVID19 from spreading in aviation transportation. According to CAAT (2020), the Civil Aviation Authority of Thailand (CAAT) came out with many new rules including but not limited to (1) All passengers need to wear a protective mask at all time in the airport and within the plane; (2) Flight crew need to always wear a protective glove and mask all time during the flight; (3) All personal including passengers, flight crew, and airport staff need to pass temperature screen check-up before entering the airport; (4) Medical check-up for all passengers and flight crew before and after every international flight and follow with 14 days quarantine after the flight, then with another last check-up for symptom after the 14 days quarantine; (5) No consumption of any food or drink for all passengers to prevent the passengers from removing their mask when eating and (6) Cancel all passengers' inflight meal and beverages.

These methods help to prevent the spreading of COVID19 to some degree. However, they also put a major restriction on the aviation industry to attract customers (CAAT, 2020). There are not many customer or tourist who would want to go to the highly infected area. Especially, when travelling by air without food or drink while travelling (i.e. in a short flight), and finally need to quarantine for the next 14 days. According to International Civil Aviation Organization or ICAO (2020), by the year 2020, the global-level analysis of total impacts on aviation estimate the airline seat capacity loss around −49% to −51%, passengers flew loss around −2.766 billion to −2.921 billion passengers, and airline revenue loss around −372 billion USD to −393 billion USD (ICAO, 2020).

2.3 Crisis Management—Decisions and Outcomes

With the downfall of commercial aviation industry due to the outbreak of COVID19. All commercial airlines need to adapt to some degree of changes in order to survive. Many of the aircraft were grounded because of less demand for travelling (ICAO, 2020). Financial income loss is unavoidable. Therefore, less passenger means less flight, and less flight means more of the unnecessary jobs are in there than the pre-COVID. Hence, it is unavoidable for almost every airline need to lay off some of their employees or at least cut down some employees' benefit (Ramchandani, 2020). Meanwhile, many governments foresee the difficulty of the commercial airline's suffer. The governments help to some degree where they can depend on each country government such as loan or funding. Table 2.1 provides a summary of each individual major airline in the world which resulted from the pandemic (Ramchandani, 2020).

From Table 2.1, it can be observed that every airline including the world top airlines is suffering from financial loss (Ramchandani, 2020). The solution of every company is very much the same is to saving outflow cash by laying off employees. Besides, later in the mid-year of 2020 most airlines can only operate within its domestic flight and without international flight (CAAT, 2020). Therefore, the airlines, for example Bangkok Airways, came out with many policies to cut down their cost but not compromise with the safety of each flight (Fig. 2.1). For example, (1) utilize with the smaller aircraft which use much lesser fuel if compare to the larger aircraft; (2) remove the unnecessary things from the aircraft to reduce weight; (3) more emphasize on fuel-saving technique from the pilots and (4) cut down employees' benefit, or even lay off some of the employees (Bangkok Airways, 2020).

Next, the chapter will break down the benefit of the above methods. ***Utilization of the smaller aircraft***: All vehicles are very much the same comparing car and aeroplane. The larger the car, or the larger the plane, the more power it needs to push it to move forward. The jumbo size plane such as Airbus A380 or Boeing747 needs huge four engines, comparing to medium size aircraft such as Airbus A320 or Boeing737 needs only two much smaller engines to operate. Max capacity of Airbus380 is between 525 and 853 seat capacity depend on each configuration of the air carrier (Airbus, 2020b), comparing to Airbus A320 which has around 140–170 seat capacity (Airbus, 2020a). Therefore, in the pandemic era with the global economic recession and not many people moving around due to the lockdown restriction, the smaller aircraft is the solution for fuel-efficiency.

Remove the unnecessary things from the aircraft to reduce weight: Normally, in the cockpit of each aircraft has tons of books, map, airport charts, manuals and relevant documents are together called 'inflight library' (Bangkok Airways, 2020). Lately, technology plays an important

Table 2.1 A summary of each individual major airline in the world which resulted from the pandemic

Airline	*Financial*	*Jobs/wages impact*	*Government support*
Singapore Airlines	Loss of 1.12 billion Singapore dollars in the first six months of 2020	4300 positions are being cut. Employees have also taken salary cuts of 10–35%	Jobs support scheme as well as from an aviation package in the form of landing and parking rebates and 11 billion Singapore dollars has been raised in liquidity
Cathay Pacific	Loss of 9.87 billion Hong Kong dollars in the first six months of 2020	Salary cuts in the form of leave without pay, while executive pay cuts of 25–30%, and job cuts are expected in the next step	39 billion Hong Kong dollars in recapitalization financing, of which 27.3 billion came from the government
British Airways	Loss of 3.8 billion pounds in the first six months of 2020	British Airways announced plans to cut up to 12,000 jobs from over 42,000 jobs. Also employees have taken a salary cut	Raising 2.75 billion euros from shareholders through a right issue and gain 300 million pounds from the issuance of commercial paper brought by the Bank of England
Qantas	Loss of 1.9 billion Australian dollars in the first six months of 2020	20,000 employees were placed on ongoing furlough and around 4000 more will be laid off by the end of 2020	515 million Australian dollars from government support. Qantas raised around 1.4 billion Australian dollars in equity, plus another 1.75 billion Australian dollars from long-term debt funding

(continued)

Table 2.1 (continued)

Airline	*Financial*	*Jobs/wages impact*	*Government support*
American Airlines (AA)	Loss of 4.3 billion US dollars for the first six months of 2020	American Airlines stated that 40,000–100,000 employees might get lay off if the government decide not to continue the support by October 2020	American Airlines got 8 billion US dollars by the federal government under the CARES ACT
Garuda	Losses of US$712.73 million for the first six months of 2020	Salary cut between 10 and 50% for at least 25,000 employees. 800 were left without pay and 180 pilots were laid off	8.5 trillion rupiahs from the Indonesian government
Lufthansa	Loss of 3.6 billion euros in the first six months of 2020	The company stated that it could cut up to 22,000 jobs from the total 138,000. Additionally, employees were already undergoing wage cuts	Received 9 billion euros in government aid, with the government stocking up a 20% stake in the company
Thai Airways	Loss of 28 billion baht (1.22 billion dollars) for the first six months of 2020	Employees have taken pay cuts. Thai Airways plan for lay off some 6000 from the total of 20,000 employees but the company said it will focus on restructuring first	Thai Airways has filed for court-led restructuring in Thailand's Central Bankruptcy Court

role in the environment saving. Instead of using a physical paper document, e-document was introduced by using a soft copy from an electronic tablet such as the iPad. The reduce weight concept also applies to the cabin equipment and amount of aircraft's fuel as well. The aircraft often not going with full tank every time. Pilots will determine the proper amount of fuel to ensure to cover the trip with no extra fuel in the tank at the destination to reduce the weight (Bangkok Airways, 2020). With

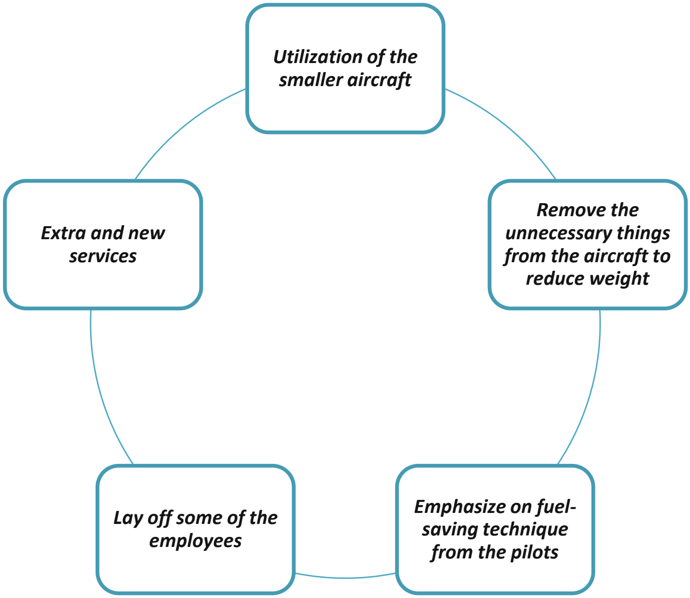

Fig. 2.1 New policies to cut reduce cost during COVID19

the concept goes green with the environment and also reduce a bit of unnecessary weight to the aircraft which finally result in the more fuel saving.

Emphasize on fuel-saving technique from the pilots: In this topic will only briefly give some examples otherwise it will drive deeply into a more technical issue. Such techniques are for example; landing with less flap setting to eliminate aerodynamic drag resulting to less fuel consumption during landing, single-engine taxi out for departure, single-engine taxi in for arrival, and using less brake during landing for utilize the length of runway (Bangkok Airways, 2020).

Lay off some of the employees: This is the usual way of doing business in every industry. If the company can not survive with the current state, that company need to reduce the cost even laying off an employee (Kim, 2003).

Extra and new services: Many airlines came up with new ideas to earn money instead of flying, for examples; Thai airways and Singapore Airline are selling inflight food to non-flying customers (Khaosod, 2020), EVA Air in Taiwan launched 'flight to nowhere' as a sightseeing flight for passengers (*The Japan Times*, 2020), Thai Airways turn their flight-simulator as a tourism attraction, Bangkok Airways opens a new flight academy for people who interested in applying pilot license (Francis, 2020).

2.4 Conclusion

With the deathly disease pandemic and the world economic downfall made the year 2020 is by far the worst year for the aviation industry. Until the COVID19 disappear or the vaccine has been developed and well distributed, all airlines are facing financial losses like the bleeding wound. Nevertheless, to slow the bleeding, the airlines need to slow down their outflown money but cutting cost in every way they can include lay off their valuable staff. Government support also plays an important role to help the industry to survive. By the prediction, commercial aviation transport will get back to normal by 2024 (IATA, 2020). The study suggests there will be many more airlines that would not survive the situation, especially the smaller airlines. The major huge or national airline government-owned will likely survive because of more cash flow available. Those who survive long enough until the outbreak is ceased will likely come back to dominate the market because of fewer competitors compare to the pre-COVID19 period.

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CHAPTER 3

The Importance of E-Commerce and Customer Relationships in Times of COVID-19 Pandemic

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3.1 Introduction

The COVID-19 pandemic radically transformed human life and global society (Barnes, 2020), unprecedented, forcing countless social and economic changes all over the world, namely, in terms of the acquisition of goods and services.

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In March 2020, with the number of infections increasing and many deaths registered, the pandemic situation quickly forced many countries to implement social isolation and confinement and social distance measures. From one day to the other, the world stopped. Schools, restaurants, hotels and a large part of commerce have closed, thus encouraging consumers and their families, in their purchasing decision-making processes, to opt for the resource and use of e-commerce tools. In an era strongly marked by technological developments and innovations, in which there are more and more internet users, largely due to the perception of the capabilities of this tool and the exponential adhesion that social networks have had in recent years, the current pandemic has come to awaken and accelerate even more the dynamics of the e-commerce by consumers, as everything is just a click away (Afonso & Borges, 2013). The form of purchase through the e-commerce tool has never been better used than now (Alves et al., 2020). Quickly and easily accessible, it is possible to sell products and services online that guarantee buyers immediate information, a greater number of options to choose from (greater range of products) lower prices and personalized and innovative services (Neto et al., 2010). Moreover, the popularity of the e-commerce in the procurement of food during the pandemic COVID-19 has added the benefits inherent in the fulfillment of the required social distancing, meeting the consumers' needs who do not wish to personally purchases (Shahidi, 2020).

Worldwide, it was necessary to adopt this new normal in practically all areas, such as work, education, health, entertainment and leisure, and consumer behavior is no exception. Inevitably, there are great possibilities for growth for this e-commerce industry (Shahidi, 2020).

During the pandemic, online shopping grew to gigantic proportions, with new online and old consumers looking to obtain products through the available means. As so, many companies have moved online to increase

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their revenues (Barnes, 2020) and to minimize the losses resulting from their empty physical facilities.

The growth trend of the e-commerce is in line with profound changes in the digital marketing strategies that companies are embarking on, which should continue to rise in periods after the current pandemic crisis so that companies can look for new markets and continue to win customers (Cruvinel, 2020).

Faced with all this change, companies definitely need to adapt to new technologies as e-commerce is shown to be an enabler of new consumption possibilities necessary for human life (Alves et al., 2020). These new forms of consumption require companies to seek for new strategies to market their products and ensure cash flows that allows them to maintain their business during and after the pandemic (Rezende et al., 2020).

E-commerce is an electronic commerce tool that is responsible for the restructuring of the relations between customers and suppliers, by simplifying business processes (Machado, 2015). Consequently, more and more e-commerce is an ally of the company's strategy in the most diverse sectors, for the benefits associated with the personal interests of consumers and for the increasing viability of sales of products and services that are given to the companies. Thus, it is important to understand the extent to which the customer is positively and negatively influenced by the experiences in e-commerce processes. The relationship with the customer is always based on good and bad experiences, which the consumer retains and which allows him to establish feedback that will influence the way he will behave in the future (Dittmar et al., 2004).

According to Kotler and Keller (2006), the management of customer relationships has a predominant weight in the strategies developed by companies, since they are aware that, increasingly, the customer is the key factor for their survival.

Also Bogmann (2000, 29) states that "good relationships with customers can be vital strategic weapons for the company." Thus, as e-commerce is a growing business modality and often the main one for many companies, understanding the relationship with the customer is considered of extreme relevance in the current context of strong digital transformation (which requires new business models—businesses digital), and society in general, namely, with regard to changes in consumer buying habits, aggravated by a large-scale health crisis whose termination timing is totally uncertain.

To this end, this article aims to study the importance of e-commerce and customer relations in the context of the COVID-19 pandemic. In this sense, it is intended to ascertain whether there is a relationship between e-commerce and the relationship with customers through the e-commerce tool.

To meet the identified objectives, the study is divided as follows. After this introduction, there is a literature review on e-commerce and customer relationships. In the Materials and methods section, the sample and the data collection procedures are presented, as well as the measurement instruments and the analytical methods used in the empirical investigation. Next, there is the results section and the discussion, where the respondents' demographic characterization is presented, the descriptive analysis to the items of the e-commerce and customer relationship measurement instruments is made, the exploratory factor analysis method is applied to define the used measurement instruments structure and to analyze the relationship between e-commerce and the relationship with customers. Finally, the conclusions, limitations, implications and proposals for future work are presented.

3.2 E-Commerce

E-commerce or electronic commerce emerged in the mid-70s (Briz & Laso, 2000). According to Hortinha (2001, 73), online commerce can be defined as "the set of commercial transactions for products and services made through the internet or other digital means." In this way, all activities via the internet, such as buying/selling goods, products, services or information, can be considered online commerce.

E-commerce is currently one of the most important growing phenomena on the internet. Consequently, brands are increasingly directing their investment to online, either through the possibility of personalization and feedback, or by the increasing time consumers spend online. The internet is not just a new way, but rather a kind of way in which interaction with users is the key word for success (Ryan & Jones, 2009).

E-commerce allows consumers to transact goods and services electronically from anywhere, without time barriers. It has expanded rapidly in recent years and the current global pandemic situation resulting from the Coronavirus disease (COVID-19) has accelerated its growth, as consumers, due to the need to purchase goods and services, have changed their buying behaviors, using digital media, fulfilling the measures of social isolation and confinement that the situation forced them to. It can thus be said that, COVID-19 has enhanced a relevant impact on the use of e-commerce by consumers and their families (Alves et al., 2020).

The digital transformation that we are witnessing, the popularization of the access and the exponential use of smartphones, the broadband connection, and the access to social networks allows an important change in society's habits, which makes digital business an essential way for companies to sell and for customers to buy (Brito et al., 2011).

It is believed that more and more the boundaries between conventional and electronic commerce tend to blur, as more and more businesses move entire sections of their operations to the digital environment, allowing them to enjoy all their advantages. Online commerce facilitates the trade of products and services quickly, and with easy access for members of society anywhere in the world (Nascimento et al., 2009).

According to Diniz et al. (2011) online commerce has come to offer flexibility in production and help organizations to acquire more customers, provide greater quality in sales, offering customers what they really need and increasing profits. Almeida et al. (2014), add that online commerce can bring benefits to both consumers and suppliers as they can enjoy personalized services, more efficient purchases, immediate information, and a greater number of choice options. Buyers also have the main advantage of an efficient purchase, due to the fact that online stores offer a wider range of products, at lower prices and personalized services (Neto et al., 2010). Most people shop online for convenience, as this form of purchase has become a practical and convenient way to purchase products and services without having to travel (Santos et al., 2019).

However, the consumer's behavior who shop online shows characteristics that are increasingly demanding in this type of commerce. People who shop online suffer from a shortage of time (Lohse et al., 2000) and want to get useful and quick information that allows them to compare prices and products (Clay et al., 2001). Thus, the use of the website is a relevant point for consumers' purchasing decision, namely, in terms of its easy use, frequent updating of content, speed of response/download time, and relevance and high quality of content (Nielsen, 1993). In addition, consumers make online purchasing decisions based on the trust and on the purchase security and in the privacy that a website transmits to them (Urban et al., 2000). With the current technological evolution, internet platforms have everything to become one of the major business channels (Ryan & Jones, 2009), thus guaranteeing the satisfaction of all these needs and consumers demands.

Next, the main dimensions that embody these needs are analyzed, as well as the requirement of online consumers that companies must provide to ensure customer satisfaction.

3.2.1 The Security of E-Commerce Purchases

The competition in terms of e-commerce is great and the one that offers the best shopping experience to the customer stands out. Trust is very important in the online world, since buying online implies providing personal data and sensitive information, such as credit or debit cards (Ribbink et al., 2004).

In a study on the antecedents of the intention to buy back in the context of online shopping, Eckert et al. (2019) concluded that a good part can be explained by the security, the privacy, the quality of perceived information, and the e-WOM (word of mouth online marketing) positive, and for the trust placed in the online shopping website. These authors also refer that the aspects related to the perceived security by consumers who buy in the online environment, are solidly related to the trust expectations in the company's websites operating in the virtual environment. On the other hand, they also point out that when websites express a concern for consumer privacy, there is a greater confidence of the consumer, in relation to the behavior of making online purchases. Thus, the provision of the website's privacy statement can awaken the perception that the website offers a high degree of privacy, which increases consumer confidence. The quality of the information provided by the online shopping website and the positively influences the trust placed on the website is also highlighted. Thus, the quality of the information is decisive in the trust of the website and reinforces the decision to complete a purchase in the online environment.

Also, Portugal et al. (2020) evaluated the antecedents of purchase intentions on hotel and inn booking websites, and concluded that the results indicated the influence of the design and the perceived quality of the website on the three constructs: risk perception, security, and feeling about ads. Thus, websites that invest in design and perceived quality improve communication and information, and can improve perceptions of security and the sentiment in relation to ads, as well as minimize the perceptions of risk which can result in greater purchase intentions.

Portugal et al. (2020) refer that, so that the perceived risk in security can be reduced, companies must adopt marketing strategies that makes the protection of consumers' personal data more reliable and permanently maintaining updated information that reliably portrays the characteristics of products.

Lindh et al. (2020) refer that people who are easy to use the internet and have user knowledge, trust in the site is not relevant to the purchase intention; on the other hand, when ease of use and internet skills are weak or non-existent, the trust of the site may be relevant. Thus, it seems to be evident that the website trusts to make an online purchase is more sensitive for users with less experience in online shopping, therefore it is an extremely important factor for companies to attract new customers online.

3.2.2 Availability of Information About Prices and Products in E-Commerce

As in conventional commerce, e-commerce also requires companies to attract potential customers, convert them and retain them for the maximum possible period. Mains (2014) refers to the need for customer engagement by companies. Customer engagement involves creating relevant content for the customer, both on social networks, websites, and blogs. What should be considered important, is to meet what each user really wants to see and know (Kaushik, 2007). The contents must, therefore, provide information tailored to the customer's needs, and it is important that the descriptions referring to products and/or services are clear and concise, and avoided terms/steps that may hold back the user's navigation (Schneider, 2011).

Engagement strategies are very important because they make it possible to attract users to the website and obtain feedback from them, allowing them to understand their needs according to the interaction they have established with the brand (Mains, 2014). Thus, the availability of the information on prices and products in e-commerce must follow a user-friendly interface and an easy navigation. These are key success factors that drive visitors to convert and want to return. The content must be rich so that there is an incentive to convert; there is nothing worse than a website having an interesting general image and its content being very weak (Kha, 2000). Content is the primary success and revenue factor.

According to Elmansy (2013), companies need to create good content, for that they must take into account some factors such as providing useful content and unique for users, and using attractive titles as it is the first information that users read and are a determining decision factor, since it is these blocks of text that give the first indication of the website's content and influence the perspective of the user to leave or stay on the website. Another factor is writing for the readers, that is, writing content that actually interests users and, if possible, with the most searched keywords so that the page's interest is greater. Last but not least, is to create content that takes users to interact with the website itself, such as asking questions, leaving comments, giving opinions, among other things.

Águeda et al. (2019) refer that listening to consumers' opinions about their experiences is a fundamental vehicle that companies cannot ignore. Companies benefit greatly from providing information at the level of consumer opinions, because they provide an effective response to consumer dissatisfaction, exploit market opportunities, and observe patterns that may represent unsatisfied opportunities.

The online customer experience can vary with the product and brands offered, so the elements of content and design affect the purchase decision, as well as the presence of social and entertainment. A products/services web page is, therefore, a fundamental tool for managers who can use it strategically to create a customer experience that turns web page visitors into buyers (Bleier et al., 2018).

3.2.3 E-Commerce Shopping Return Policies

The return of the customer's information and their purchases is also a fundamental aspect that must also be focused on the engagement model. This model, focused on engagement, it's from a strategy that offers a feedback point of information about customers, allowing them to recognize their needs. In the end, it ends up having a big impact on convert and retain, because from the customer's stage that is known, e-commerce must adapt to the same (Mains, 2014). The main purpose of the e-commerce websites is to convert a mere visitor into a customer. Hence the importance in this type of trade of return policies on customers and their purchases. However, customer service does not end when the product is delivered, there is the post-sale, it is important to follow their parameters to maintain a good relationship with customers (Herzer, 2013).

Souza et al. (2019) studied satisfaction with the service received in the post-sale services, based on parameters such as information, store assistance, salesperson service and speed in solving problems, and satisfaction with the services provided. Consumers understand that the possibility of exchanges and returns is an obligation of companies. This possibility is protected by law in case that the product as a defect. Consumers consider that offering the possibility of exchange or return is a comparative differential for organizations, increasing confidence and security at the purchase moment (Souza et al., 2019). Purchase return policies are a strategic element of companies' competitiveness. Most people shop online for convenience, as online shopping has become a practical and convenient way to purchase products without having to travel. In these cases, the possibility of return is a fundamental aspect considered by consumers. Return policies are a concern for online retailers, creating benefits when there is a possibility to retrieve the returned product or when they are able to sell another alternative product to dissatisfied consumers (Santos et al., 2019).

Thus, Reverse Logistics (RL) can bring many benefits to consumers, and companies that have the post-sale LR have an advantage in the consumer satisfaction conquest process, which is considered one of the biggest company's success factors (Kotler & Keller, 2006), and stand out in the market for their differentiation from competitors. Santos and Oliveira (2018) confirm that the LR practice promotes positive results.

3.2.4 Sustainability and Privacy in E-Commerce

Paulista et al. (2008) understand that sustainable development presents itself as an imperative issue to create conditions for survival for the human species. For these authors, the concepts, approaches, and tools available for sustainable development need systematic treatment of human regulation in their interaction with the environment. Formulating emotional indicators is difficult and, as a result of the complexity of developing scientific models for application in dynamic systems, such as human beings, society, and the environment. In addition to natural, intellectual, and financial capital, one could also speak of emotional capital. This is because, the emotional space of individuals, communities, nations, can be responsible for the level of environmental sustainability. Society needs a sustainable path and it is up to each human being, through his options, to participate in the development process (Rodrigues & Ferreira, 2020).

Sustainability is a heterogeneous concept. In addition to pro-environmental behavior, another relevant concept is the sustainable behavior. There is a strong interconnection between human consumption and the integrative view between social, economic and environmental factors at three different times: production, consumption, and the generation and recycling of waste. The concept of sustainability is presented in the consumption patterns and its consequence for environmental conservation (Santos et al., 2019).

For Apolinário (2019), sustainability is now a central issue in people's daily lives, and it is important to articulate education and sustainability in the awareness of environmental education. Thus, the ecological paradigm points to a sustainable way of life, stimulating practices that reinforce a new way of life and the development of environmental education. Sustainability is a way of being and living that requires aligning human practices with the limited potential of each biome, with the needs of present and future generations. Living sustainably implies not only the economic issue, but also environmental, social, political integration.

In this sense, sustainability must also be extended to online businesses. In the online shopping process, as consumers do not buy in physical stores, car trips or other means are eliminated and the associated carbon emissions. Online shopping can reduce trips to shopping centers and the like. However, product deliveries need to be guaranteed, which involves more delivery locations, more carriers, therefore more traffic, and shopping packages that they carry.

According to Faghri (2016), the growth in the number of online purchases has generally increased travel time, traffic delays, and emissions from vehicles on the transport network. According to this author, the number of vehicles on the road and the total number of miles traveled did not decrease with the growth of online purchases. But this is not the only environmental problem that e-commerce has. There is another problem that involves trade as a whole. We are talking about consumerism. Consumerism is a cultural attitude that promotes the acquisition and consumption of goods as a vehicle for economic growth and personal satisfaction. Thus, as the demand for goods increases, their production also increases. Which, in turn, leads to greenhouse gas emissions, increased land use, extreme use of water supply, waste disposal, and accelerated climate change.

To act at the sustainability level, the ideal solution would be to stop consuming. Stop buying, whether online or not. But we have to be realistic, and we are aware that this is not possible. Human beings can consume less, of course, but stopping completely is not feasible. So, the fundamental concern of companies has to focus, is on the level of deliveries. Companies should choose partners that have more environmentally friendly shipping alternatives (for example, using a fleet of electric vehicles), they should incorporate more environmentally friendly options in their products and packaging and packaging.

In this type of trade, it is also important to identify the factors that influence consumer choice in relation to the sustainability of products, and to intervene appropriately to change unsustainable consumer behaviors (Taghikhah et al., 2019).

In addition to the concerns about sustainability in e-commerce, another fundamental aspect is privacy which is closely linked to online security. Privacy is an issue with a high degree of importance, because whenever a user visits a website he is automatically providing information about himself. The website has access to what the user bought, in which country and locality he is, what page he was on, what type of search engine he uses, gender, age, among other information. It is important that the website shows the ability to pass on the message to the user that the data provided by him is kept securely. In this perspective, trust is a determining factor that contributes a lot to the website reputation and success. If security and credibility appears, it will lead the user to have no doubts about making an online transaction. If the overall experience is positive, this will make the user a recurrent one, loyalty to the brand (Schneider, 2011). Customers who return to the website after having purchased their first purchase and/or service, are self-titled retained customers (Schneider, 2011), which is what any brand wants, since the main objective of all businesses must be to maintain customers and create loyalty relationships. Studies have shown that, on average, an organization loses half of its customers every five years, and costs about five to ten times more to consolidate a new customer than to maintain one (Kha, 2000).

3.3 Relationship with Customers in E-Commerce

From Ford et al. (2003) the point of view, the relationship can be seen as a set of interactions (experiences and expectations) and mutual conditioning of behaviors, over time, between a company and the customer, or other party (partner). Thus, a company's livelihood depends on all the relationships it maintains, regardless of the nature of its customers, suppliers, competitors, banking, state, among others (Nogueira, 2006). Each company has a link with third parties, which characterizes its business following continuous processes of expression, reproduction, alteration, and evolution of joint interactions aimed at two parties involved. There is a history of interactions that will shape the way in which two entities relate in the present and intend to do in the future (Nogueira, 2006). A relationship is built over time, based on a set of episodes/transactions that occurred.

With the importance of the customer relationship being increasingly present in the companies' strategy, over time a tool called Customer Relationship Management (CRM) was built that helps companies to manage the customer relationship. The main definition of a CRM is to provide value to the organization so that it can create marketing campaigns that allow customers to retain their customers and to increase profitability (Chaffey, 2009).

Among the many benefits for organizations of CRM implementation, the fastest response to customer complaints/requests stands out, increased efficiency due to automation, more in-depth knowledge of customers, the purpose of the Contact Center in customer relations, increasing marketing and sales opportunities, identifying the most profitable customers and obtaining customer feedback that allows the offer of new services and/or products (Correia, 2009).

In this sense, Kim et al. (2009) states that satisfaction is the successful ingredient to create a long-term relationship with customers and contributes to customer loyalty. Thus, if a customer is satisfied, his intention to choose the competition will be almost nil (Tsai & Huang, 2007). Trust also helps to create long-lasting relationships with customers (Kassim & Abdullah, 2010).

A website is the main means of establishing a relationship with the customer, so another ideal strategy for establishing relationships with customers is Electronic Customer Relationship Management (e-CRM) which is the link between a website and communication via email marketing (Chaffey, 2009). In an online commerce platform, it is very important to create a direct relationship between the users who visit you and what the company wants. Thus, creating content that meets what the user wants and exceeds their expectations is a great success factor, but also a great challenge (Enge et al., 2012).

In short, satisfaction, trust, security, privacy, the proper functioning of the website with adequate and updated information, and the client's own interaction with the website/company, are a set of factors that improve and link the company's relationship with the clients.

As e-commerce is a tool responsible for restructuring relations between customers and suppliers and for simplifying business processes, it has become an ally of companies' strategies in the most diverse sectors due to the benefits associated with the personal interests of consumers and for the time greater viability of sales of products and services within the business. Thus, understanding the relationship with the customer in their e-commerce experiences becomes extremely relevant for companies to define and implement management policies for their e-commerce platforms that enhance the brand's tangible and intangible results.

Thus, based on the arguments explained and the objectives defined, the following research hypothesis was formulated:

Hypothesis There is a positive relationship between e-commerce and the relationship with customers who use this modality.

3.4 Materials and Methods

3.4.1 Sampling and Data Collection

The target population of the present study are all the individuals residing in Portugal, who have already made purchases online at least once. The sample consists of 306 individuals with the characteristics of the target population. To carry out the data collection, and in order to operationalize the whole process due to the social isolation derived from the COVID-19 pandemic quarantine, we used the *snowball* non-probabilistic sampling method.

On the social network Facebook, on July 29, 2020, a link was shared that gave access to the questionnaire created in Google Forms. The acceptance of responses took place until August 20, 2020, and there were 15 shares. In the publication made on the social network Facebook, the link was accompanied by a short text calling for the voluntary participation of individuals. In this text, the objectives of the study were also presented, the anonymity and confidentiality of the data was guaranteed and it was also guaranteed that the data provided would only be used for the purely statistical purposes of the present investigation.

3.4.2 Research Instrument

In the present study, the questionnaire survey was used as the data collection instrument. The questionnaire starts with a question that serves as a prerequisite for the study: "Do you usually resort to online commerce?" Respondents who do not usually resort to online commerce were directed to respond to socio-demographic character issues (gender, age, and educational qualifications). The questionnaire for respondents who usually use online commerce consists of four parts. The first part aims to find out how long they have been shopping through e-commerce, and whether it is due to the COVID-19 pandemic that they were forced to resort to e-commerce for the first time, and whether since March 18, 2020 (when quarantine started in Portugal) they used e-commerce more frequently, and what kind of products they buy through the e-commerce. The second part refers to the e-commerce assessment instrument, consisting of 21 items. The third part consists of 8 items, where one seeks to know about the relationship with the customer. The fourth and last part, analyzes the socio-demographic data (gender, age, and educational qualifications).

To evaluate online commerce, was used the E-Commerce Evaluation Scale (EES), proposed by Demo et al. (2014), consisting of 21 items (see Table 3.2), and the items were answered using a Likert scale of five points (1—*not very important* to 5—*very important*). That is, the degree of the importance of each item is analyzed for the shopping experience and for the logistic subsystems involved in online purchases. The Cronbach's alpha value for the EES obtained by Demo et al. (2014) study was 0.88.

The relationship with the customer was assessed using the Customer Relationship Scale (CRS), proposed by Rozzett and Demo (2010), and was assessed using two different response scales (see items in Table 3.3): six items were assessed using a Likert agreement scale of five-point (1—*strongly disagree* to 5—*completely agree*), and two items were responded through a five-point Likert satisfaction scale (1—*very dissatisfied* to 5—*very satisfied*). The Cronbach's alpha value for the CRS obtained in the Rozzett and Demo (2010) study was 0.92.

3.4.3 Analytical Methods

After collecting the data, a database was created with the answers to the questionnaires and, subsequently, the data were analyzed in the IBM SPSS software Statistics 25. Descriptive measures were used to characterize the sample (mean, standard deviation, minimum, maximum and frequency tables). Subsequently, the existence of outliers and item sensitivity were analyzed using the calculation of asymmetry coefficients ($|Sk| \leq 3$) and flattening ($|Ku| \leq 7$) according to Marôco (2018) indications.

The model's factorial validity was assessed using exploratory factor analysis techniques. According to Pestana and Gageiro (2014), to ascertain the adequacy of the application of the exploratory factor analysis to the sample under study, the Kaiser-Meyer-Olkin (KMO) sample adequacy index, and the Bartlett's sphericity test (value KMO greater than 0.8 reveals good sample suitability and $p < 0.05$ in the test indicates that the variables are significantly correlated). To perform factors' extraction, the principal component method was used (factorial loads greater than 0.50 are satisfactory), followed by a varimax rotation. To measure the minimum number of factors to retain, the Kaiser criterion (eigenvalues greater than 1) was used.

The reliability of the scales and their dimensions were assessed with Cronbach's alpha: values between 0.8 and 0.9 present a good internal consistency, and above 0.9 a very good internal consistency (Marôco & Garcia-Marques, 2006).

According to Marôco (2018), in the social sciences and humanities the magnitude of the correlations is considered: (i) weak when $|r| < 0.25$; (ii) moderate when $0.25 \leq |r| < 0.5$; (iii) strong when $0.5 \leq |r| < 0.75$, and (iv) very strong when $|r| \geq 0.75$.

3.5 Results and Discussion

3.5.1 Respondents Demographic Characteristics

In the present study, 426 individuals who resided in Portugal answered the questionnaire, but only 306 (71.8%) constitute the sample of the present study, since we only retained those who had already purchased online, on platforms or online sites, at least once; the remaining 120 (28.2%) said they had never made purchases online.

Of the 306 individuals who resort to e-commerce, 82% have already made purchases in this modality for at least one year. Only 10.1% indicate

Table 3.1 Type of products purchased online since March 18, 2020

	n	%
Footwear or clothing	198	64.7
Information technology/technologies	143	46.7
Education and culture	81	26.5
Food	79	25.8
Health and hygiene products	68	22.2
Bricolage	14	4.6
Did not make online purchases in this period	7	2.3
Beauty products	6	2.0
Sports articles	5	1.6

that due to the COVID-19 pandemic they were forced to resort to online commerce for the first time. However, the majority of individuals (56.9%), since March 18, 2020, have resorted more frequently to e-commerce.

The ages of individuals who use e-commerce are between 19 and 80 years old, with an average of approximately 40 years old ($SD = 11.61$). The majority of individuals are female (56.5%). As for the education level, 65.7% ($n = 201$) have higher education, 30.7% ($n = 94$) have secondary or vocational education and 3.6% ($n = 11$) have basic education.

Table 3.1 shows the product types purchased online by the Portuguese since March 18, 2020. As it can be seen, footwear and clothing ($n = 198$, 64.7%) and information technology/technologies ($n = 143$, 46.7%) are the categories that the Portuguese most buy online.

3.5.2 *Descriptive Analysis of the Items of the Scales Under Study*

According to Table 3.2, most items have high average values (greater than 3.5 on a scale of 1–5), which is an indicator that the logistics subsystems and the shopping experience are of great importance for e-commerce. As in the study by Demo et al. (2014) the security item on the website regarding the requested bank details (item 13) is the one with the highest average ($M = 4.67$; $SD = 0.84$). Regarding the sensitivity study, it appears that all items have asymmetry coefficients ($|Sk| \leq 2.53$) and flattening ($|Ku| \leq 5.78$) within the parameters to assume the normality assumption.

Table 3.3 shows that most items have high average values (above 3.5 on a scale of 1–5), which is an indicator that there is a good relationship

Table 3.2 Descriptive analysis of the EES items

Items	*M*	*SD*	*Sk*	*Ku*
1. Clarity in the product return procedures	4.28	1.07	−1.06	−0.17
2. Online communication tools for questions, complaints and suggestions	4.14	1.10	−0.73	−0.73
3. Easy to cancel the order	4.19	1.10	−0.86	−0.52
4. Loyalty programs (e.g., earn 1 in every 10 purchases)	2.94	1.23	0.38	−0.54
5. Ease of unsubscribing from the site	3.63	1.26	−0.19	−1.18
6. Possibility to monitor the order status	4.19	1.11	−0.93	−0.30
7. Security of the site regarding the personal information requested	4.52	0.95	−1.79	2.32
8. Quality of the product's raw material	4.39	1.00	−1.32	0.70
9. Company with sustainability actions (e.g., environmental and social programs)	3.45	1.16	0.13	−0.86
10. Clarity in the disposal procedures after using products and materials, when necessary	3.39	1.13	0.21	−0.63
11. Easy to navigate on the site	4.14	1.07	−0.66	−0.87
12. Compliance of products with quality and safety standards.	4.17	1.09	−0.80	−0.60
13. Security of the website regarding the requested bank details	4.67	0.84	−2.53	5.78
14. Price comparison tool with competing products or physical stores	3.56	1.12	0.11	−0.88
15. Promotional actions (e.g., discount coupons, promo codes)	3.53	1.15	0.07	−0.88
16. Availability of the product in stock	4.09	1.07	−0.52	−1.03
17. Ease of the registration on the website	3.95	1.10	−0.31	−1.22
18. Delivery reliability (the product will arrive)	4.52	0.92	−1.65	1.67
19. Online experimentation/testing tools (e.g., reading a book chapter before buying it, illustrative and explanatory photos and videos)	3.51	1.15	0.06	−0.86
20. Opinion survey (regarding the product purchased, the website, new products)	3.66	1.16	−0.09	−1.01
21. Personalization of the website (personal pages on bank websites, link to history and products already purchased)	3.39	1.15	0.14	−0.64

Source Own elaboration

with customers who do e-commerce. Note that respondents are quite satisfied with the products/services quality in the e-commerce (M = 4.01, $SD = 0.79$). Regarding the sensitivity study, it appears that all items have coefficients of asymmetry ($|\text{Sk}| \leq 1.41$) and flattening ($|\text{Ku}| \leq 3.45$) within the parameters to assume the normality assumption

Table 3.3 Descriptive analysis of the CRS items

Items	*M*	*SD*	*Sk*	*Ku*
1. The experiences/contacts in e-commerce exceed my expectations	3.78	0.84	−1.22	1.90
2. E-commerce is correct and honest with your customers	3.49	0.87	−0.63	0.31
3. I identify myself with e-commerce	3.70	0.90	−0.73	0.50
4. E-commerce treats me like an important customer	3.41	0.95	−0.46	−0.17
5. E-commerce (products, services, information, procedures) deserves my trust	3.78	0.73	−0.95	2.10
6. I recommend e-commerce to friends and family	3.86	0.78	−1.11	2.27
7. Personalization of service in e-commerce	3.77	0.86	−1.22	1.67
8. Quality of the products/services in e-commerce	4.01	0.79	−1.41	3.45

Source Own elaboration

3.5.3 *Exploratory Factor Analysis*

A first exploratory factor analysis was applied to the 21 items of the EEC, which resulted in the elimination of item 4, as it presented a commonality below 0.50. The Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Sphericity test for the remaining 20 items revealed a very good sample fit ($\chi^2(190) = 3606.477$, $p < 0.001$, KMO = 0.927). The factorial solution obtained is found in Table 3.4, and presented a structure consisting of four dimensions that, all together, explains 66.39% of the total variance. First dimension was designated as Purchasing Security, and explains 21.99% of the variance, and consists of eight items (items 6, 7, 8, 11, 12, 13, 17, and 18); second dimension was nominated as Availability of the Information on Prices and Products, explains 19.80% of the variance and consists of six items (items 14, 15, 16, 19, 20 and 21); third dimension was termed the Return on Purchases Policy, explains 12.61% of the variance and is composed by three items (items 1, 2 and 3); and the fourth and last dimension was designated Sustainability and Privacy, explains 12.00% of the variance and consists of three items (items 5, 9 and 10). In the factor analysis applied to the study by Demo et al. (2014) for the Brazilian context, it was only possible to find one dimension that explained 26.4% of the explained variance. The values of Cronbach's alphas of the EES (0.936) and their dimensions are greater than 0.80, which is considered an indicator of good reliability.

Table 3.4 Matrix of factorial loads and communalities of the EES

Items	*Dimension*				h^2
	1	*2*	*3*	*4*	
13. Security of the website regarding the requested bank details	0.80				0.71
18. Delivery reliability (the product will arrive)	0.74				0.66
7. Security of the site regarding the personal information requested	0.74				0.71
12. Compliance of products with quality and safety standards	0.64				0.65
8. Quality of the product's raw material	0.64				0.58
11. Easy to navigate on the site	0.62				0.59
17. Ease of the registration on the website	0.55				0.61
6. Possibility to monitor the order status	0.52				0.54
20. Opinion survey (regarding the product purchased, the website, new products)		0.77			0.67
15. Promotional actions (e.g., discount coupons, promo codes)		0.73			0.59
19. Online experimentation/testing tools (e.g., reading a book chapter before buying it, illustrative and explanatory photos and videos)		0.72			0.65
21. Personalization of the website (personal pages on bank websites, link to history and products already purchased)		0.71			0.61
14. Price comparison tool with competing products or physical stores		0.68			0.63
16. Availability of the product in stock		0.59			0.69
1. Clarity in the product return procedures			0.77		0.73
3. Easy to cancel the order			0.77		0.72
2. Online communication tools for questions, complaints and suggestions			0.74		0.75
9. Company with sustainability actions (e.g., environmental and social programs)				0.85	0.84
10. Clarity in the disposal procedures after using products and materials, when necessary				0.83	0.82
5. Ease of unsubscribing from the site				0.54	0.53
Eigenvalues	4.40	3.96	2.52	2.40	
% explained variance (66.39%)	21.99	19.80	12.61	12.00	
Cronbach's alpha	0.896	0.871	0.833	0.804	

Source Own elaboration

Table 3.5 Matrix of factorial loads and communalities of the CRS

Items	*Dimension* 1	h^2
6. I recommend e-commerce to friends and family	0.83	0.68
5. E-commerce (products, services, information, procedures) deserves my trust	0.82	0.68
3. I identify myself with e-commerce	0.75	0.56
4. E-commerce treats me like an important customer	0.74	0.55
2. E-commerce is correct and honest with your customers	0.73	0.54
1. The experiences/contacts in e-commerce exceed my expectations	0.72	0.51
7. Personalization of service in e-commerce	0.72	0.51
8. Quality of the products/services in e-commerce	0.71	0.51
Eigenvalues	4.535	
% explained variance	56.682	
Cronbach's alpha	0.887	

Source Own elaboration

The exploratory factor analysis application for the eight items of the CRS, the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Sphericity test revealed a good sample fit ($\chi^2(28) = 1197.554$, $p < 0.001$, KMO = 0.881). Table 3.5 shows a one-dimensional structure that explains 56.68% of the total variance, which is in accordance with Rozzett and Demo (2010) study. The Cronbach alpha value of the CRS is 0.887, which is considered a good reliability indicator.

3.5.4 *Relationship Between E-Commerce and Customer Relations*

Table 3.6 shows that between the dimensions of the EES there is a statistically positive and significant relationship ($p < 0.01$), with these correlations being classified as strong (Marôco, 2018). This fact is an indicator of the existence of a second-order factor, which can be called e-commerce assessment and comprises the following dimensions: Purchase Security, Availability of the Information on Prices and Products, Return Policy, and Sustainability and Privacy Policy. It is also possible to observe that there is a positive and statistically significant relationship between the dimensions of the EES and the relationship with customers, which empirically supports the hypothesis under study. The confirmation of the hypothesis corroborates what is recommended in the literature, insofar

Table 3.6 Correlation matrix

	CR	*PS*	*AIPP*	*RP*
CR	0.262**			
AIPP	0.264**	0.683**		
RP	0.190**	0.652**	0.515**	
SP	0.128*	0.581**	0.567**	0.521**

Note CR = Customer Relationship, PS = Purchase Security, AIPP = Availability of Information on Prices and Products, RP = Return Policy, SP = Sustainability and Privacy
$^{**}p < 0.01$, $^{*}p < 0.05$
Source Own elaboration

as the importance given to e-commerce, namely, in terms of the availability of the information to quality customers and which responds to their needs, the purchase security, the return policy, and the sustainability and privacy improves the relationship with customers, contributing to their loyalty. Therefore, companies should pay attention to these dimensions of e-commerce when promoting it together with their customers. As can be seen, the dimensions that most contribute to improve the relationship with customers are Availability of the Price and Product Information ($r = 0.264$) and Purchase Security ($r = 0.262$) which have a moderate correlation (Marôco, 2018). These facts confirm that creating informative content that meets what the user wants, despite being a huge challenge for companies, is a major success factor in e-commerce (Enge et al., 2012).

3.6 Conclusions

The objectives of this study were to study the importance of e-commerce and the relationship with customers in the context of the COVID-19 pandemic, and also to investigate the existence of a relationship between the importance of the e-commerce and the relationship with customers of this type of modality.

The results show that after the quarantine of the COVID-19 pandemic, most individuals started to use online commerce more frequently, with only 10.1% indicating that due to the COVID-19 pandemic they were forced to resort for the first time to e-commerce. The product categories most purchased online since the quarantine were footwear and clothing and Information technology/Technologies.

The items on the e-commerce Evaluation Scale proved to be indicators that the logistical subsystems; the shopping experience are of great importance for e-commerce, with the website security related to the bank details requested being of high importance for individuals. In general, individuals consider that there is a good relationship with customers who do e-commerce and they are quite satisfied with the products/services quality in this type of commerce.

Among the dimensions of the e-commerce Evaluation Scale, there is a statistically positive and significant relationship, which is an indicator of the existence of a second order factor called e-commerce Evaluation composed of the dimensions: Purchase Security, Availability of the Information on Prices and Products, Purchase Return Policies, and Sustainability and Privacy. It is also possible to observe that there is a positive and statistically significant relationship between the dimensions of the e-commerce Evaluation Scale and the relationship with customers; the dimensions that most contribute to improve the relationship with customers are Availability of Price and Product Information, and Purchase Security.

As mentioned in the methodology section, the sample reflects a photograph of behavior during a pandemic period. Thus, the need for future studies is justified by the interest of updating and knowledge of the evolution of e-commerce in Portugal. Another point to be investigated is whether the factors and their items are being changed and how they are being changed, and to monitor their evolution process. Thus, it is proposed, in future studies, the application of factor analysis to confirm/obtain a structure for the evaluation of e-commerce, always up to date and as close as possible to reality.

This is an innovative study in Portugal, as no study on this topic is known for Portugal. It is expected that this study will contribute to increase the scientific knowledge in e-commerce for retailers, in order to help them to better identify the purchased products online, the type of actions valued by consumers and the relationship between customers and e-commerce. This knowledge can be fundamental for the definition and implementation of policies and management strategies for your e-commerce platforms that could enhance better organizational results.

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CHAPTER 4

Successful COVID-19 Prevention Factors and Their Effect on the Economy: A Comparison Between Thailand, Vietnam and Australia

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4.1 Background

As of 21 October 2020, COVID-19 cases around the global totalled 41,169,789 (Worldometers, 2020a). The number one country leading in terms of infections is the USA with over 8.5 million cases, followed by India at 7.6 million cases and Brazil with 5.2 million cases (Worldometers, 2020a). Interestingly China, which is ground zero for COVID-19 (WHO, 2020), has a total of 85,715 cases (Worldometers, 2020a). One country which experienced the first contact with the virus since it's spread out of China yet has a particularly low number of infected in Thailand.

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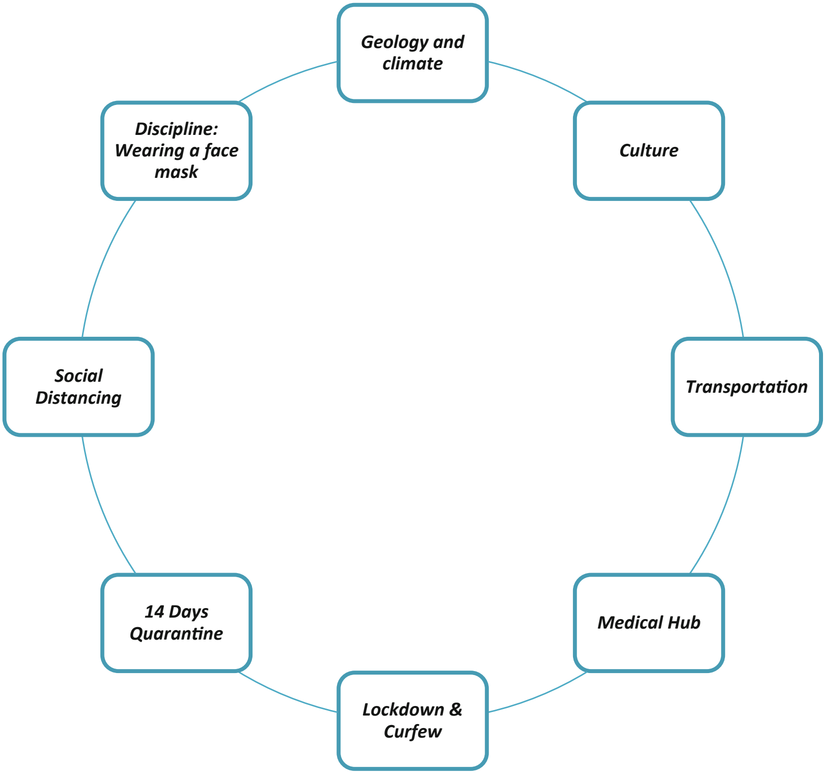

Fig. 4.1 COVID-19 Impact Factors (*Source* Author created)

According to the Thailand Department of Disease Control (DDC, 2020) Thailand has only experienced 3709 cases with 155 active cases in the hospital and 3495 recoveries and 59 deaths. This low rate of infections and deaths may be attributed to a multitude of factors that hampered not only the spread of COVID-19 but the lethality. For this chapter, particular factors identified as influencing the effectiveness of COVID-19 responses are: Geology and Climate, Culture, Transportation, Medical Hub, Lockdown and Curfew, 14 Days Quarantine, Social Distancing, Discipline: Wearing a Face Mask. These pertinent factors may be key contributors to understanding reasons for the spread, or lack thereof, of the contagion COVID-19.

This chapter will be mainly focusing on Thailand, Vietnam and Australia and comparing factors that have led to their successful prevention of COVID-19. Vietnam emerges as an apt comparison due to its latitudinal and cultural similarity to Thailand—with further scrutiny desired due to its border with China. Understanding how and why Vietnam was so successful at battling the virus may bring to light important factors in understanding how countries may in the future fight future pandemics. Additionally, Australia draws an appropriate example due to its relatively close proximity to the Asiatic region and, in particular, it's the reliance on China for trade and tourism purposes (Mao, 2020).

As a result, this chapter will compare the preventative measures and relevant factors of Vietnam and Australia to Thailand to potentially glean insights into the effective methods these countries had in combating COVID-19. Lastly, the chapter will compare and discuss the economies of Thailand, Vietnam and Australia in how they fared during the COVID-19 outbreak. Guiding the rest of the chapter is the model presented in Fig. 4.1 which will serve as a point of comparison for the 3 countries.

4.2 Geology and Climate

Thailand. Thailand is located in Southeast Asia just above the equator (Hafner, 2020). Thailand is separated from China by Myanmar and Laos. Thailand's equatorial location means the climate is warm and humid all year round. The average temperature throughout the year is around 25–29 °C (Hafner, 2020). According to the World Health Organization (2020), Thailand's first COVID-19 case was registered on 13 January 2020. Fortunately, the summer season in Thailand began around March and April. In March 2020, the temperature in Bangkok rose to maximum of 40 °C at noon and 25 °C at night (AccuWeather, 2020). Virus' typically survive better and longer in cold and humid weather (Pirtle & Beran, 1991), but the dry and hot summer of Thailand reduced the initial impact of COVID-19 and its ability to survive in the heat or on objects.

Vietnam. Vietnam exhibits a similar weather pattern to Thailand due to their close locations. Vietnam is located in the tropics and the south of Vietnam experiences a monsoon-tropical climate from the South China Sea whereas the north experiences more typical seasonal weather. Due to Vietnam's diverse landscape of mountains and expansion across multiple latitudes, the country is prone to natural disasters (Linh et al., 2020). Vietnam had all the typical signs of a country prone to disaster if a pandemic struck — a 1300 km border with China and an underdeveloped (but well-functioning) healthcare system — yet Vietnam overcame the odds and successfully combated the virus (Thuy, 2020). Similar to Thailand, Vietnam's weather during the initial stages of the pandemic measured around 27 °C in the south, 25 °C in central Vietnam and 17 °C in north Vietnam and is on average the driest time of year which may have been an important factor curbing the virus' spread (Thomas Cook, 2020).

Australia. Australia has one of the most diverse weather patterns in the world due to its large size. Australia accounts for 5% of all landmass, is the world's largest island and, simultaneously, the world's smallest continent with an area of 7,692,024 km^2 (Geoscience Australia, 2020a). From temperature highs of 50 °C and lows of –23 °C, to rainfall disparities in the wet tropic north and to arid dry deserts, Australia is home to a wide variety of different climates (Geoscience Australia, 2020b). Due to this vast difference in weather conditions, the majority of Australians (85%) live in cities or areas within 50 km of the coast—which, coincidentally, is also central to all trade and business centres (Clark & Johnston, 2016). Australia's first COVID-19 case was recorded in late January and the spread may have been slowed by the hot and dry summer weather that Australia experiences at this time.

4.3 Culture

Thailand. Thailand is known as the "Land of Smiles" as Thai people are known for gentleness, compassion, hospitality, friendliness and closely to introvert people (Hays, 2008). Thai people respect other people a lot and tend to keep their distance when talking to others whilst also respecting other people's privacy. As Thai culture is "contactless culture", they rarely touch each other and greet each other by "Sawasdee"—which is done by pressing both hands together at the chest and bowing to one another (Hays, 2008). By the Sawasdee greeting, Thai people do not need to touch others, which contrasts with other cultures where shaking hands, hugging or kissing is prevalent. These physical interactions make it easier for the virus to spread between people.

Vietnam. In Vietnam, the good of the community trumps that of the individual, a common characteristic of a collectivist culture (Hofstede, 2011). A highly collectivistic culture takes responsibility for others and is exemplified by the fact that most Vietnamese during the pandemic tended to take care of others (Walden, 2020). For example, in villages where close-knit communities are common, Vietnamese people greatly supported contract tracing efforts. Also, if mandatory isolation was broken or suspected cases arose then people reported this to the authorities (Linh et al., 2020). In fact, Vietnam's government was heavily reliant on its citizens for cooperation and used militaristic campaign strategies to strum up patriotism in its people, which worked well with many young Vietnamese volunteering at hospitals and quarantine camps to quell the virus for the good of Vietnam (Nguyen, 2020). Further, Vietnam's extensive history in preventing and controlling epidemics such as H1N1, SARS and the Zika virus contributed to the government and people's heightened and rapid response time (Linh et al., 2020).

Australia. Australia, in comparison to Thailand and Vietnam, is a far more individualistic culture which means Australians are more likely to think of themselves or their immediate families as opposed to the community at large (Hofstede, 2011). This could mean, in terms of spreading the virus, Australians will have a lower propensity to obey government restrictions. Accordingly, most government messaging and campaigns advocating thus targeted these individualistic aspects which appeal to keeping your family safe. For example, an ad campaign focused on young people and their effect of transmitting COVID-19 to their elderly parents (Hunt, 2020). Yet, Australia ranked 3rd in its effectiveness combatting COVID-19 of all OECD countries—which can be attributed in part to the Australian people following restrictions and the advice of authorities (Thwaites, 2020).

The Australian government also had a strong cause for concern as Australia's indigenous people, with a history dating back 65,000 years, are highly susceptible to the virus. This susceptibility is due to the prevalence of diseases which are present in COVID-19 fatal cases (e.g. cardiovascular disease, hypertension or diabetes) and rates of these chronic conditions are higher in indigenous communities than non-indigenous ones (Yashadhana et al., 2020). Issues are further compounded by the remoteness of indigenous people's communities which are thus not privy to proper and immediate health care, sanitation and adequate housing for quarantining (Yashadhana et al., 2020). Therefore, stricter lockdowns of areas with large indigenous communities (i.e. Northern Territory) had greater travel restrictions to protect these at-risk groups with quarantines required between not only states but communities (Gibson, 2020).

4.4 Transportation

Thailand. Transportation in Thailand's capital, Bangkok, can be convoluted and complicated as the cities road network is poorly and randomly designed a long time ago (Tanaboriboon, 1993). Modern-day public transportation, such as the sky train (BTS) and subway (MRT) routes, do not cover the city sufficiently (Jenks, 2003). Moreover, other traditional kinds of public transport, such as buses and trains are old and minimally maintained (Jenks, 2003). Therefore, most people in Bangkok prefer to travel using their own personal vehicle—which coincidentally has Bangkok listed as one of the world's worst cities in terms of traffic (Bangkok Herald, 2020). With fairly poor transportation in Bangkok and also other cities in Thailand, Thai people tend to use their personal vehicles more than the public transportation system, but fortunately this helped reduce the spread of COVID-19.

Vietnam. Vietnam's transportation system is one of the most unique in the world. With a population of nearly 100 million, there are over 61 million motorbikes and are the main form of transport in cities; with 80% of transport occurring via motorbike and the public transportation little-used comparatively (Kiet, 2019; MCD Team, 2020; Worldometers, 2020b). As a result, and similarly to Thailand, this reliance on motorbikes may have effectively curbed the spread of the virus as people avoided being close together and possibly prevented the severity of the initial COVID-19 outbreak. Moreover, to combat the spread of the virus, the prime minister ordered the transport ministry and local authorities to shut down public transportation to restrict travel between provinces. This shutdown reduced overall domestic travel by 21.2% in addition to 54.3% by rail, 33.5% by sea and 22% by road when comparing March 2019 passenger numbers against March 2020 (GSO, 2020).

Australia. Due to Australia's immense size, the majority of the country relies on its roads to connect cities and towns. Further, cars accounted for 64.4% of all passenger kilometres followed by buses (4.99%) and rail services (3.73%) (Colacino & Hensley, 2019). However, most Australian's live in major cities (71% of the population) and within those cities cars are of less importance—for example, in Sydney's CBD public transport typically accounts for 71% of trips in peak hour (ABS, 2017; Colacino & Hensley, 2019). As a result, outside of major cities, the spread of the virus may be less prevalent due to a large proportion of Australians using cars. In fact, multiple cases spread via Sydney's buses—yet social distancing using public transport is impossible as Australians in cities need to get to work and back home (Carmody, 2020). Consequently, most cases of COVID-19 were within major cities due to the larger population density and thus the result of community transmissions. Tangentially, due to the lockdowns, Australians living with these cities are now moving into less dense regional areas (Brook, 2020). These prospective large-scale migrations out of cities will reduce the population density of Australia's cities and may lessen any virus spread in the future.

4.5 Medical Hub

Thailand. The Thai government and the ministry of public health have established a road map in developing Thailand to become the world's leading medical hub (Bangkok Post, 2020). In order to achieve this goal, Thailand has heavily emphasised four keys areas: medical wellness, medical services, academic activities and medical products (Bangkok Post, 2020). Thailand currently has over 370 private hospitals of which 50 are accredited by the Joint Commission International (JCI) global standard—the 4th highest in the world (Bangkok Post, 2020). Moreover, Thailand enjoys a strategic location as a logistic hub presenting an opportunity as a gateway to other growing economies such as Cambodia, Lao PDR, Myanmar and Vietnam—this means Thailand is an ideal investment destination for many medical device manufacturers and healthcare service providers (Bangkok Post, 2020). Cost advantage, high-quality medical services, attentive care of medical staff and unique wellness services have increased the demand for Thailand's medical and wellness from abroad (Bangkok Post, 2020). Thailand was ranked as the world's 6th best-prepared country for confronting the COVID-19 pandemic by John Hopkins University's 2019 Global Health Security (Bangkok Post, 2020). The Thai government also launched a campaign to provide free COVID-19 testing and medical care for all infected Thai nationals and foreigners who require medical care within the country.

Vietnam. As of 2019, the Vietnamese medical sector is growing at 18–20% a year with over 357,000 foreigners coming to Vietnam for medical examinations and treatments totalling over US$2 billion (IMTJ, 2020; Van, 2019). Akin to Thailand, Vietnam is growing as a medical hub with large-scale multi-national corporations partnering with local medical companies in medical research and drug production (Robert Walters, n.d.). Vietnam has also become an attractive medical tourism hub and is drawing patients from Singapore as it is becoming more expensive (Connell, 2016). Further, Vietnam has garnered a fledging reputation for fertility, cardiology, cosmetic surgery and dental treatments (Thuy et al., 2019). However, in a similar pattern to Singapore, it is believed that Thailand is outpricing itself to its ASEAN competitors and that once travel restrictions are lifted medical tourists will flock to Vietnam—even Thai people themselves (Thailand Medical News, 2020). The emerging nature of Vietnam as a medical hub may have been a strong contributing factor to the low amount of cases and deaths and is resultant of the Vietnam government's 5-year health sector plan from 2011 which aimed to cement Vietnam as a pharmaceutical and medical production hub and resulted in strict ethical and regulatory conduct (Robert Walters, n.d.).

Australia. In stark comparison to Thailand and Vietnam, Australia is not considered a medical hub and in fact Australian's typically travel overseas to undergo surgery or medical treatments with 15,000 Australians travelling every year to do so (Smart Traveller, 2020b). However, Australia is also becoming a medical hub destination with international travellers coming to Australia for quality care and in fact, high-net-worth individuals from large economies such as China are now choosing Australia to undergo medical care over other countries such as the USA (Margo, 2019). Factors impacting Australia's reputation as a medical hub are skewed due to poor price competitiveness and lack of government support in investing into Australia as a medical hub in comparison to other countries such as Thailand or Vietnam (Deloitte, 2011). Overall, whilst Australia has one of the highest standards of cares in the world, its reputation as a medical hub pales in comparison to countries such as Vietnam or Thailand.

4.6 Lockdown and Curfew

Thailand. During the first period of the outbreak in Thailand, the government announced a lockdown and curfew law to every province within the country (National, 2020). A lockdown restricst population movement across provinces and curbs the subsequent spread of the virus (National, 2020). On the other hand, the curfew restricted the population from leaving their homes from 10.00 p.m. to 04.00 a.m. in the morning (National, 2020). Moreover, all department stores were closed throughout the country and all restaurants were also only permitted for takeaway or delivery. Most offices in the main cities were closed and businesses began working from home in order to cope with the lockdown and curfew law. Currently, in Thailand COVID-19 has a surprisingly low infection rate so the government eased restrictions on 15 June 2020 (National, 2020). However, the Thailand border is still closed for international travellers with exceptions granted for military personnel, cargo imports and returning ex-pats (CAAT, 2020).

Vietnam. On the 31st of March, it was announced that Vietnam would begin 15 days of national social distancing from Wednesday the 1 April 2020 to control the community transmission of COVID-19. To be more specific, gatherings of more than two people in public areas other than schools, hospitals or workplaces were banned. All traffic from COVID-19 hotspots to other cities and provinces was banned, with the exception of essential and emergency services such as food delivery, manufacturing and work over the border (Nguyen, 2020). The nationwide restrictions were lifted just over 3 weeks later on April 22 (Walden, 2020). A second wave began in Da Nang on July 31 and travelling to and from the city were heavily restricted with large-scale testing undertaken—in fact, the World Health Organisation (WHO) postulated a third of the Da Nang's households were tested during this time (Walden, 2020). These lockdowns proved successful with all participating and, as a result, travelling restrictions to and from Da Nang were eased with domestic flights resuming in early September (Walden, 2020).

In terms of international restrictions, all visas were no longer issued and international traveller entry was ceased indefinitely on 22 March 2020 with the exception of those travelling for official or diplomatic reasons where a 14-day quarantine was mandatory upon arrival (Vietnam National Administration of Tourism, 2020). Unlike Thailand however, international travel restrictions are still in place and even those with visa exemption certificates are not permitted entry (Smart Traveller, 2020a).

Australia. Australia's first case of COVID-19 was detected on the 25th of January with three more also testing positive on the same day—all of whom were Chinese tourists travelling to Australia for holidaying purposes (Daoud, 2020; Doherty, 2020). Then, after approximately 928 cases and 7 deaths from COVID-19, Australia locked its border to international travellers and non-residents—with returning Australian permanent residents and citizens required to undergo a 14-day quarantine upon return (Burke, 2020). Similarly, Australia's states and territories began restricting travel between them as of 19th March with a mandatory 14-day quarantine required (ABC, 2020a). Across Australia, there were restrictions on the number of people allowed to patron retail stores, restaurants, cafes and gyms to enforce social distancing laws—with each state having a different severity of limitations (Brown, 2020). Subsequently, these measures seemed to decrease the COVID-19 spread and Australia seemed to have successfully curtailed the virus. However, on May 25, a hotel used for quarantining international travellers in Melbourne reported a night manager testing positive for the virus (Baker, 2020). Consequently, security guards enforcing quarantine contracted the virus and spread it to their families which in-turn began a second wave (Baker, 2020). This second wave resulted in over 18,000 cases and 800 dead and was localised predominately in Melbourne (Butt, 2020). However, the Victorians government's response to a second wave has been compared in effectiveness to Vietnam and the second wave was ultimately declared over on 26 October 2020 (Toole, 2020).

4.7 14 Days Quarantine

Thailand. Thai citizens who are abroad and wish to return back to Thailand require medical certification before they travel. After these citizens arrive back, state authorities will provide a place for quarantine (normally an isolated hotel) and will be quarantined for 14 days. This will be followed up with a medical check-up after the cessation of the 14-day period (CAAT, 2020).

Vietnam. All foreign entry is restricted into Vietnam, even to those with a visa exemption certificate (Smart Traveller, 2020a). Entry is conditionally offered to diplomats, experts, investors and their families and Vietnamese residents returning home (Vietnam Travel, 2020a). All those entering are subject to mandatory health declarations and hotel quarantine for a 14-day period (Vietnam Travel, 2020a). Additionally, those who have had any close contact with those carrying COVID-19 will be expected to self-quarantine for 14 days (Vietnam Travel, 2020b). However, as of 22 September 2020, commercial flights have resumed to Guangzhou, Taiwan, Seoul, Tokyo, Phnom Penh and Vientiane (Vietnam Travel, 2020b).

Australia. The only people allowed to travel to Australia are citizens, permanent residents, immediate family members and those who have been in New Zealand for 14 days (Department of Health, 2020). Travellers entering into Australia are required to undergo a 14-day quarantine which must be conducted in their city of arrival even if travelling elsewhere (Department of Health, 2020). This quarantine must be conducted at a designated facility such as a hotel before travellers can go to their home or travel within the state/interstate (Smart Traveller, 2020c).

On a domestic front, states and territories began closing their border to domestic travellers to curb further spread of the virus. Those travelling between states were required to self-isolate for 14 days with a fine imposed for those found breaching their quarantine with penalties reaching up to $11,000 and six months possible jail time in NSW and even up to $62,000 for individuals in Northern Territory (Daily Mercury, 2020). Such stringent fines are cited as being large deterrents for non-compliant behaviour and are a certain factor in encouraging those to not breach quarantine laws and thus potentially spread the virus.

4.8 Social Distancing

Thailand. The new normal is "social distancing" with medical experts advising to keep a distance of 6 feet to curb the spread of the virus (CDC, 2019). As a result, public utilities had to make markings on areas such as benches, toilets and even elevators. Most Thai people respected and followed the social distancing rules.

Vietnam. On April 1st, Vietnam implemented stringent social distancing mandates with a required distance of two meters between people (Vietnam Briefing, 2020). These measures were relaxed in parts of the country on April 16th and on May 6th a loosening of these guidelines were made for public transportation systems (Vietnam Briefing, 2020). As in Thailand, public areas were marked to enforce these social distancing measures. Due to the collectivistic nature of Thailand, these norms were typically followed and obeyed (Hofstede, 2011).

Australia. Similar to Thailand and Vietnam, the Australian government implemented strict social distancing rules to impede the spread of COVID-19. These rules impacted businesses and households across the country by limiting gatherings—for example, weddings were restricted to 10 guests in Queensland and, in a stricter sense, Victoria where only 2 people are allowed to visit a household per day (ABC, 2020b; Bosley & Landis-Hanley, 2020). In fact, part of Australia's success is attributed to Australians quick compliance with social distancing measures with many allegedly spurred to action by images of Italy's COVID-19 situation early on in the pandemic (Duckett & Stobart, 2020). These social distancing restrictions have been highly effective in preventing the spread of COVID-19 and are a pertinent factor in Australia's success.

4.9 Discipline: Wearing a Face Mask

Thailand. According to YouGov (2020), Thai people are the most likely to wear face masks and routinely use hand sanitiser across the six ASEAN countries. Thai people mostly tend to follow societal norms such as wearing a face mask. Other reasons are due to the massive amount of PM2.5 in Bangkok and Chiang Mai in 2019, so face masks were easily available in department stores, supermarkets and drug stores (Boonbandit, 2019). As a result, most Thai people owned or even possessed a stockpile of facial masks.

Vietnam. In comparison to Thailand, Vietnam was the 2nd most likely country to wear a facemask in public and use hand sanitiser (YouGov, 2020). Strict rules on face masks still apply and those who are found not to wear masks in public are imposed a 300,000VND fine for non-compliance (Duong, 2020). Compounded by Vietnam's extensive experience with prior pandemics (H1N1, SARS, Zika etc…), there was little resistance to wearing masks and 91% of Vietnamese now wear one (Duong, 2020; Walden, 2020). Most Vietnamese people agree that wearing a face mask even after the pandemic is over is beneficial for the community. A key reported factor in Vietnam's success in terms of face masks stems from how little politicised they were and that from the beginning the government made it clear that public health and commercial interests are not to be entangled (Thuy, 2020). In fact, Hanoi's CDC chief and six others were arrested for corruption in the purchasing of testing kits and smaller vendors fined for price-gouging face masks (Do & Dinh, 2020; Thuy, 2020). The government's quick action to quell non-compliance was a definite factor in Vietnam's success against COVID-19.

Australia. In stark contrast to Thailand and Vietnam, Australia has a much different attitude to face masks. Nearly half of Australians saw little reason to wear a face mask even if they weren't sick and less than 20% would wear a mask to protect others (Bricker, 2020). This negative attitude towards face masks potentially stems from Australia's highly individualistic orientation where a person's well-being and their immediate families take precedence over the others (Hofstede, 2011). In addition, between March and April 2020, there was only a 10%

increase in face mask sentiment within Australia (from 11% taking action by buying mask in March to 21% in April) (Bricker, 2020). This inaction on the part of Australians contrasts their relative compliance with strict lockdowns and may be explained by Australians short-term orientation indicating a preference for quick results and viewing societal change as suspicious (Hofstede, 2011). Such behaviours may mean Australians wish to undergo brief periods of uncomfortableness (i.e. lockdowns) in an effort to maintain the status quo and not undergo long-term change (i.e. wearing face masks). Such stark differences between Thailand, Vietnam and Australia are presented in their COVID-19 responses and yet, all were relatively effective in the end.

4.10 Economic Comparison of Thailand, Vietnam and Australia During the Outbreak

Thailand. The Thai economy was severely impacted by COVID-19 due to Thailand's heavy reliance on international trade and tourism with 15% of Thailan's GDP coming from tourism (WorldBank, 2020). The World Bank predicted Thailand's economy in 2020 shrunk by 5%, signifying one of the largest declines in the East Asia and Pacific regions (WorldBank, 2020). However, Thailand's economy is predicted to recover to pre-COVID levels within the next 2 years with economic growth predicted to rise by 4.1% in 2021 and 3.6% in 2022 (WorldBank, 2020). The COVID-19 outbreak has led to many job losses, especially in the tourism sector due to social distancing and lockdown restrictions. Further, mobility restrictions, such as lockdowns and curfews, were crucial to decreasing the transmission rate but simultaneously severely dented consumer spending trends, especially in retail and recreational services. Furthermore, less global demand in global trade has hit Thailand's exports and disrupted global supply chains—such as automobiles and agriculture products, of which Thailand is a major exporter (WorldBank, 2020). This is further reflected in the sales of durables, which experienced a sharp decline of nearly 12% in the first quarter of 2020 (WorldBank, 2020). Also, the amount of Thai people who earn below $5.5 per day is projected to double from 4.7 million in Q1 2020 to an estimated 9.7 million in Q2 2020, before recovering slightly to 7.8 million in Q3 2020 (WorldBank, 2020).

Not just in Thailand but everywhere else in the world, preventing the spread of the virus could lead to the downfall of the economy. However, Thailand has plans to open up the country for tourists from exclusively selected countries which have a low rate of infections (Kucheran, 2020). The plan to reopen includes 3 phases (Kucheran, 2020): Phase 1 is for business travellers, investors, skilled workers, people with Thai family members, and teachers; Phase 2 is for medical tourism travellers, and; Phase 3 is for general tourists. As a precautionary measure, all travellers need health insurance that covers COVID-19, need a pre-health declaration card filled out by a doctor prior to departure, and thermal scans along with a COVID-19 test upon arrival (Kucheran, 2020). Finally, followed by 14 days quarantine before these visitors can travel freely within the country. However, tourists must stay in Thailand for at least 90 days in order to get visa permission.

Vietnam. The revenue of the tourism and hospitality industry in Vietnam 2019 was over 31 billion USD, an increase of 17.1% from 2018. There were 85 million domestic travellers and 18 million international tourists in Vietnam most of whom were from China (i.e. 32%) and other Asian countries (Citrinot, 2020). Due to the threats of COVID-19 since the 3rd of February, all festivals have been cancelled and restrictions have been imposed on international tourists. This significantly impacted the whole tourism industry, especially cities such as Nha Trang and Khanh Hoa, which attracted more than 70% of Chinese tourists. Furthermore, since 11 March 2020, many provinces and cities such as Phu Yen, Ninh Binh, Tien Giang, Ha Long and Hanoi stopped all tours and visits to their tourist attractions due to growing concerns amidst new cases emerging from people coming back from Europe (Nguyen, 2020). The Formula 1 (F1) Vietnam Grand Prix in Hanoi scheduled for April 5th was also postponed due to the outbreak. The ongoing national social distancing rules taking effect on 1 April 2020 also means a halt to domestic travel. The loss of the tourism industry in Vietnam is approximated to be around 7 billion USD if the pandemic lasts until mid-year (Vietnam Insider, 2020).

According to Trading Economics (2020), international arrivals to Vietnam slumped 99.1% year-on-year to 14.8 thousand in October of 2020, amidst the coronavirus panic. Significant decreases were found in visitors from Asia (–99%), China (–99%), South Korea (–99.2%), Japan (–99.1%); the USA (–99.4%); Europe (–99.2%) and Australia (–99.2%). Furthermore in March 2020, Ho Chi Minh City reported a 71% drop in revenue compared to March 2019 (Dong, 2020). Da Nang, Vietnam's fifth-largest city, located on the central east coast is an important pillar of the industry and experienced a loss of tourists costing 700–800 billion

Vietnamese dongs (US$30–34 million) in the first quarter, according to the city's tourism association (Bohane, 2020).

Vietnam tourism in January 2020 grew 33% compared to January 2019 but decreased by 22% in February and by 68% in March due to the COVID-19 pandemic and it is predicted to reach the lowest in April 2020 due to global travel bans, lockdown and social distancing (Quang et al., 2020). However, Mauro Gasparotti, Director of Savills Hotels Asia Pacific, believed that local travellers, which accounted for 82.5% of all tourists in 2019, are expected to recover in a shorter period (Savills, 2020a). Further, in Q1 2020, there were 13 million domestic tourists with 6.8 million in-house guests, a decrease of 18% compared to Q1 2019 (Vietnam National Administration of Tourism, 2020).

Hospitality had the weakest first-quarter performance on record, with significant falls in occupancy and ARR. The initial decline in occupancy was from a slump in international demand, first from Chinese tourists, then Koreans and Europeans. The Ho Chi Minh Department of Tourism reports 90% of tourism SMEs have temporarily closed. Hotel occupancy in March declined by 56–60 percentage points (ppts) or approx. 70% Year on Year (YoY) in Ho Chi Minh and Hanoi (CBRE, 2020a, 2020b). In Ho Chi Minh, overall occupancy was down –26 ppts Quarter on Quarter (QoQ) and –27ppts YoY to 48% in Q1/2020. Four-star was down –27ppts YoY and 5-star –31ppts YoY (Savills, 2020b, 2020c).

Australia. Akin to Thailand and Vietnam, Australia's economy was also adversely affected by COVID-19. Australia's GDP is expected to decline by 2.7% for 2020–2021 in the wake of the strict lockdown in Victoria and interstate border closures further hindering the economy (IBISWorld, 2020). Due to COVID-19, unemployment is projected to an average of 7.7% over 2020–2021, which is 2.06% higher than the previous year (IBISWorld, 2020). Economic efforts by the government, in particular the JobKeeper scheme, has significantly aided unemployment numbers (IBISWorld, 2020). Interestingly, the ASX200 (the 200 largest publicly listed companies in Australia) peaked at 7162.50 points before crashing to 4546 points on the 23rd of March on the back of Australia's international border closure news (Market Index, 2020). However, as of the 21st October has made significant gains to 6191.80 points (Market Index, 2020). A potential explanation for this disparity between Australia's economy and stock market is that these companies do not actively contribute to overall employment and only contribute minor value-added aspects whilst employing fewer workers (Kehoe, 2020)—yet, the gap between the ASX's stalwartness compared to the economic uncertainty is maybe reflective of multiple factors, yet real reasonings are purely speculative (Taylor, 2020).

Consumer sentiment also dropped significantly with the arrival of COVID-19 and thus Australians are less likely to spend due to uncertain economic outlooks (IBISWorld, 2020). As a result, multiple government schemes to encourage spending have been rolled out such as $750 stimulus packages (Hanrahan, 2020). Encouraging spending is vital for Australia's economy as without consumer spending, business revenues are lower and thus pay less tax to the government (BT, 2020). If such an event occurs, the government relying on exports is not sustainable during a pandemic where all international borders are shut (BT, 2020). In fact, from April until September 2020, consumer sentiment of a strong Australian economic recovery has grown with many believing a lengthy recession inevitable (McKinsey, 2020).

One of the greatest impacted sectors is Australia's (once) flourishing tourism sector. International visitors are down 40% from January to June 2020 when compared to 2019, a 1.8 million visitor loss (TTF, 2020). There have been losses of nearly 100,000–133,200 jobs in Australia's tourism sector and a subsequent salaries/wage loss of $3.9b–$5.3b; this not only affects workers abilities to pay bills but also potential spending to stimulate the economy and tax contributions (TTF, 2020). Moreover, interstate restrictions have impacted state tourism levels but may increase by Christmas of 2020 (IBISWorld, 2020). International tourists, in particular those from China, are estimated to contribute $12 billion to the Australian economy of which represents 27% of total amounts spent by international tourists which are now lost and bears a heavy toll for Australia's tourism sector (Cheng, 2020).

Overall, whilst the Australian economy has been decidedly impacted, in the grand scheme of global markets the Australian economy has been quite resilient. For example, the global 2020 Sustainable Development Report ranks Australia as 3rd amongst all OECD countries as one of the most effective in its COVID-19 response—behind South Korea and Latvia (Thwaites, 2020). This report shows Australia as having one of the lowest deaths per million (3.88 deaths per million) and did so whilst enjoying one of the lowest economic or social impacts of any OECD countries (Thwaites, 2020). To demonstrate using Google smartphone data, Spanish and Belgium citizens movements were restricted by 64 and 67% respectively, yet Australian citizens only had their movements restricted by 25% (Thwaites, 2020). Therefore, Australia's response to COVID-19 has been greatly positive and efficient overall.

4.11 Conclusion

Thailand is one of the countries that have successfully handled the COVID outbreak. However, Thailand is a country which heavily depends on its exports and tourism sectors—both of which were heavily impacted by restrictions and lockdowns. Therefore, to support the economy in the long term, Thailand needs to eventually accept the risks of opening up the country but for selected exclusive agreement countries.

Similarly, Vietnam has been negatively impacted by the virus but, like Thailand, will emerge stronger due to the government's quick actions. In fact, Vietnam's effective response to COVID-19 remains the envy of most of the international community (Walden, 2020). A similar aspect of Thailand and Vietnam is the depoliticising of public health and the economy, if countries do not solve the health crisis an economic crisis is ongoing and will persist (Thuy, 2020). Therefore, keys to the success of these countries certainly belong to cultural aspects related to collectivistic mindsets where the good of the many is put before individual outcomes.

Australia's response has been equally effective but in a different way to Thailand and Vietnam. Australia has been very successful overall with strict lockdowns and early border closures allowing Australia to prevent the spread of COVID-19—where in comparison to Vietnam and Thailand, face masks were not as pertinent a factor. Australia's effectiveness stemmed from Australians listening to experts and the federal and state governments pursuing health mandates on how to effectively battle the virus.

This chapter has imparted important insights into these three countries responses to COVID-19. As the "new normal" continues and the effect of COVID-19 unfolds, we can look to these three countries and observe what effective measures and factors aided the most in each countries success. Looking to these countries may help in battling the pandemic and aid future efforts in preventing further outbreaks or reducing the effect of second waves.

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CHAPTER 5

Marketing Automation in Business-to-Business Relationships and the Emerged Value Cocreation

Diogo Mattos, Beatriz Casais, and Alexandra Braga

5.1 Introduction

The value cocreation in business is approached within the logic of the network economy where all the stakeholders of a company participate together in the design and production of a new product or service (Grönroos, 2008). Studies have been conducted exploring how companies, suppliers, consumers, partners and other organizations participate

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in this relationship network (Järvinen & Taiminen, 2016). Grönroos (2008) concludes, for example, that the interaction between suppliers and consumers is a crucial part of the process of value cocreation for organizations. The Services Dominant Logic (SDL), explained by Vargo and Lusch (2009b) considers the value cocreation by integrating the resources of the company's suppliers with other private and public resources. Therefore, value cocreation occurs considering what customers do with what suppliers produce and what they think is of value to them (Grönroos & Ravald, 2011).

It is within this context that content marketing and its automation tools fit. Marketing automation, within the context of process automation, gives companies the opportunity to nurture, classify and track leads (contacts) throughout the sales process to ensure that the content is delivered to the target correctly (Järvinen & Taiminen, 2016). With the evolution of marketing and technologies, it is important to conceptualize content marketing and inbound marketing in order to understand how companies, customers and suppliers cocreate value in both B2C and B2B (Cova & Salle, 2008). In the B2C market, content marketing focuses on communication on its different platforms: email marketing, website, social networks, Youtube and text messages (Rowley, 2008; Wuebben, 2017).

Content marketing and inbound marketing in the B2B market have been presented in the literature from the perspective of technology to promote brand awareness and favor the generation of leads, interaction and increase the acquisition of new customers. This also occurs through the marketing automation process (Halligan & Shah, 2014; Holliman & Rowley, 2014; Järvinen & Taiminen, 2016). Although content marketing and inbound marketing play an important role for the value cocreation in B2B, it cannot solve a problem: the follow-up of leads until the closing of the sale and beyond (the post-sale) (Järvinen & Taiminen, 2016). This problem becomes more relevant by the time of contact restrictions due to COVID pandemic.

This chapter focuses on the relationship between value cocreation in business-to-business (B2B) by marketing automation, as a process that requires the participation of the company's suppliers, the company itself as the service provider, its resources and the customer (other companies), that also play an evident role in cocreation and delivery of value through their tools (Holliman & Rowley, 2014; Järvinen & Taiminen, 2016; Vargo & Lusch, 2009b).

The main objective is to understand whether it is possible to cocreate value in business-to-business through marketing automation. To illustrate the phenomenon under study, four companies were chosen as an exploratory method, which represent good examples of cocreating value in a business-to-business environment with practical use of marketing automation and inbound marketing techniques.

5.2 Theoretical Framework

5.2.1 Value Cocreation

The Service Dominant Logic (SDL) considers that consumers interact with suppliers during product design, as well as in production, delivery and consumption (Vargo & Lusch, 2009a). Even so, the dominant logic of goods disregards the meaning of value and the way it is created, interactively, in commitment to other actors, singularly or collectively, as organizations, resources that are integrated by other actors to create service (Vargo & Lusch, 2009b). Value cocreation occurs as a consequence of a joint action between supplier and consumer and/or customer, where the consumer is the main subject in its own creation of value and the supplier, as a service provider, reconfigures the role as a facilitator in the creation of value in use. The possibilities for the supplier to be a cocreator of eminent value in the process of creating consumer value become limited if, therefore, there is no connection between these two parties. Interactions and the process of creating joint value can occur during the relationship and even during development, design, manufacture and delivery. This occurring, the consumer participates as codeveloper, codesigner and coproducer in the supplier process (Grönroos & Ravald, 2011).

Recent literature has presented a new value cocreation model in contrast to the value in use or value in exchange approached in the theory of SDL. In this innovative model, called "creating value-in-interaction", different roles of actors are considered on interactive platforms (Ramaswamy & Ozcan, 2018). The authors draw attention to the interaction between the interactive actors and the structured and interactive network of system environments. Actors here mean their conventional role as a consumer, but also as a producer. In an increasingly digital world, this model of cocreation of value is becoming increasingly relevant since, through interactive interfaces, social networks, websites, blogs and, more recently, virtual reality, Internet of Things (IoT), artificial intelligence and related technologies come to represent an integrated system of cocreation of value.

The literature emphasizes cocreation particularly in the relationship between companies and their customers (B2C), but also gives attention to the phenomenon in B2B (Alves et al., 2016). The named group 4 is extremely relevant because it considers the dominant logic of services as a driver for innovation in the cocreation of value in business relationships. More than that, this is the most appropriate logic for the application of content marketing and inbound marketing within the B2B market.

5.2.1.1 Content Marketing

Content Marketing arose in the editorial world where words, images and animations were translated into something of interest to the public who sought in newspapers and magazines the answer to their desires (Holliman & Rowley, 2014). There is a need to share relevant material among the different channels available in the digital environment, such as websites, blogs and social networks (Wuebben, 2017). Such media include also digital news, electronic newspapers, e-books, online directories, music downloads, games and software package updates (Rowley, 2008). E-marketing is considered an aspect of marketing communication and therefore complements other actions of the marketing mix such as public relations, advertising and sponsorship. Likewise, content marketing can be considered a strategic approach that is based on the creation and distribution of relevant content in order to generate value and be consistent with the main objective of encouraging some action by the consumer. The authors also claim that the technological evolution of digital platforms has come as a means of creating rich and attractive content, making it easier to influence consumer behavior and perception.

There is a relationship between companies and consumers where one helps the other in the operation of the business, creating a sense of belonging. Thus, the consumer has more confidence in companies that listen to their needs and ideas, in the same logic proposed by SDL mentioned in the previous section. In this sense, cocreation brings benefits to organizations. In this field of delivering value to the customer, inbound marketing is established as a strategy that pulls from the audience what they need. This audience, in turn, has previously researched a certain product or service and is more susceptible to purchase (Järvinen & Taiminen, 2016). Value creation is present in the production of content.

And content, in turn, is a key component of inbound marketing techniques, a central concept for interaction between consumers and brands and between brands alone (Holliman & Rowley, 2014). The same authors also suggest that current consumers no longer accept being interrupted by a brand or being “pushed” by something they are not even looking for. The reality is that today’s consumers no longer want to be interrupted by an advertisement or harassed by salespeople. They want to be helped. Therefore, inbound marketing is a strategy that pulls people to share relevant information, creating useful and applicable content (Halligan & Shah, 2014).

Inbound has been pointed out as an effective technique and gradually adopted by many companies because it only delivers what the consumer wants to buy. In other words, inbound marketing is a method of attracting, interacting and delighting people in order to grow a business that offers value and builds a long-term relationship of trust. It is considered the best way to buy, sell and serve consumers, in order to be beneficial to both sides of the negotiation. When considering the perspective of inbound marketing one also perceives a cycle of value delivery through its three stages: attraction, interaction and enchantment, with the consumer at the center of everything. In this sense and in the dominant logic of services and their operant resources, inbound marketing works best when the consumer assists in the marketing program and the company can work collaboratively with the consumer in order to generate value. In other words, this methodology is much more effective and complete when a company’s customers are seen as marketing partners or simply cocreators of value (Vargo & Lusch, 2009a).

Thus, considering the different aspects regarding content marketing and its auxiliary tool, inbound marketing, the role of value cocreation as a connecting element of the network formed between companies, consumers and their various stakeholders became even more evident. The following section aims to clarify how the delivery of value is present in this relationship between companies, using marketing automation to personalize the best solutions for the most appropriate moment in the relationship.

5.2.1.2 Marketing Automation

One of the most complete and current definitions for marketing automation considers a software to automate marketing processes, such as customer segmentation, consumer data integration and campaign management. Choosing the right solution will help to focus on the consumer and accelerate buyers within the sales funnel (Bagshaw, 2015). However, marketing automation can also be considered an opportunity for companies in nutrition, classification and tracking of leads (contacts) throughout the sales process and thus ensure that the content is delivered to the target correctly. Marketing automation is a platform that facilitates, automates and measures marketing tasks and workflows, such as email marketing, landings pages, website, social networks, text messages and Youtube (Järvinen & Taiminen, 2016). Considering it is a technology to manage all marketing processes, as well as multifunctional campaigns automatically through different channels, it is essential to emphasize that the use of this program is more effective when it integrates the marketing and sales departments in order to meet the main objective of automation: increase revenues, generate a higher return on investment (ROI) for the company and make the marketing team more agile.

A company produces effective content via inbound marketing and manages to generate new leads fluidly and at the same time wants to scale the business. This is the exact time to adopt marketing automation and nurture those leads qualified to transform them into customers (Halligan & Shah, 2014). It is clear that there is a strong connection between automation practices with inbound marketing and content marketing. The main advantage is that automation makes it easier to send personalized messages, one to one, making brand communication much stronger. In this way, the focus is greater on the quality of messages in a marketing campaign. The marketing team, in turn, manages to generate more value by capturing data and interests of prospective clients, without pushing solutions that are not even sought after, as already mentioned in the previous session.

As a result of the adoption of automation software, companies increase their conversion rate (CTR), cross- and up-selling, and the retention rate. Therefore, it is also important to emphasize that marketing automation complements areas such as interactive or direct marketing through the addition of automated processes (Heimbach et al., 2015).

The personalization of the message mentioned above is intrinsically related to the construction of an effective funnel that integrates sales and marketing. In the literature there is a multitude of models proposed for the sales funnel, but there is an especially interesting model that proposes and explains a customer acquisition funnel, a vital part of any company's marketing (D'Haen & Van Den Poel, 2013). The algorithm proposed by these authors is designed to make the decision-making process less arbitrary by providing model-based prospects. In addition, they ensure that the algorithm works in a B2B environment and uses the company's current customer base to predict prospects. It also contains a feedback loop to improve the interative predictive development process, which they say is often omitted in certain investigations.

The customer acquisition funnel is usually divided into 4 parts. Most of it is the funnel entry called suspects, which are all new prospects available. The second part, immediately following, are the prospects, those suspects who have already been selected within some criteria. After that comes Leads, they are the prospects that will be qualified and contacted by the sales team. The leads then become customers, the final step in the funnel. In the funnel proposed by D'Haen and Van Den Poel (2013), represented by the light gray part of the figure below, more prospects will be selected, but they will be of high quality. The time gained from increasing the prospect list should be set aside to further qualify them. In addition, more qualified leads, lead to a higher conversion rate of customers. Investigations show that a lower conversion rate increases the cost of acquiring customers. On the other hand, increasing the conversion rate will also decrease the cost of acquiring customers.

In opposition to this model of customer acquisition presented, there is the model of Järvinen and Taiminen (2016). While content marketing and marketing automation tactics promise opportunities for B2B sales, very little is known about how companies working in B2B can harness these tools to guide potential buyers involved in the different stages of the marketing process. The Järvinen and Taiminen (2016) sales funnel takes the process further as it does not end with customer acquisition. They propose the sales funnel as a cycle where current customers can enter again as they serve as a target for repurchase, up-selling and cross-selling. Therefore, as customers can occupy any position in the funnel, the last step is renamed as Deals.

In each part of this new sales funnel, there are vital aspects to be considered. In the first transition, from suspects to prospects, it is essential to note that B2B salespeople will benefit from focusing on the quality of the suspects and not on the quantity. The authors also reinforce that, compared to other methods, the suspects obtained through content marketing are more likely to be qualified as prospects. In the second part, from prospects to leads, it is important to note that content marketing offers new opportunities for B2B sellers to facilitate the lead qualification process. In the final phase, from leads to agreements, the urgency from salespeople of contacting customers is clear so that they do not abandon the funnel (Järvinen & Taiminen, 2016). The time it takes the prospect to make a purchase decision and pass sales through the B2B funnel can also be considered one of the major barriers to the adoption of automation software by companies. Without the help of an automation program, functions such as personalizing the message would be humanly impossible. It is also important to note that marketing automation only fails because there is no solid foundation at the top of the funnel placed to support the middle of the funnel.

5.3 Methodology

In order to solve the problem of tracking leads until the end of the sales process (Järvinen & Taiminen, 2016), value cocreation in B2B has to be present in marketing automation. Only through this means will the marketing processes be able to be managed quickly and easily, increase the conversion of leads, the consequent customer retention and more importantly, the return on investment (ROI). Therefore, the main objective of this work is to explore the contribution of marketing automation in companies in order to reduce wasted time and overcome the physical relationship restriction in a pandemic context, as well as increasing the company's revenue. For that purpose, the authors conducted a qualitative research based on semi-structured interviews.

Four companies with B2B operations were selected for this exploratory study: a Portuguese Marketplace startup in the area of logistics and transportation; a Portuguese company with several businesses focused on the digital market and with an international presence; the largest Digital Marketing company in Brazil and finally, a Portuguese company that manufactures professional cleaning equipment.

Data was analyzed through three main categories: (1) The process of value cocreation in B2B; (2) The practice of inbound marketing and (3) The management of marketing automation. Each question asked within the three categories had some objectives to be achieved. The objectives for category 1 were: to contextualize the cocreation of value and to explore business relationships. For category 2 were: defining inbound marketing, verifying whether inbound marketing really improves a company's results through the cocreation of value, discussing how customers are treated within the relationship network and identifying whether companies follow the 4 steps of inbound implementation suggested by SDL. As for the 3rd and final category, the objectives were: to see if there is marketing automation within the organization, to check if there is customization in the delivery of customer service, to confirm whether the use of marketing automation really improves the results and to see if there are any disadvantages in marketing automation.

5.4 Results and Discussion

Companies sustained the theory of dominant service logic in B2B context as a driver for innovation and value cocreation for business relationships as previously noted in the literature (Alves et al., 2016), as well as in the relationships with customers (Vargo & Lusch, 2009b). Data clearly show the logic of value in use advocated by Grönroos and Ravald (2011) where cocreation occurs as a joint value between supplier and consumer and, therefore, both are treated as "business partners". This partnership can then be seen throughout all the business relationships mentioned in the interviews, even in those companies that operate in the two markets: B2B and B2C.

5.4.1 The Practice of Inbound Marketing

When considering the actions of content marketing and inbound marketing, there is a deep knowledge about the concept of inbound marketing within the context of services. In the majority of interviewed companies, inbound marketing is part of the activities carried out, either to facilitate the work of the marketing team internally, or to offer services to customers through inbound actions on the company's website. For one company, in most cases, the client also looks for this "acculturation" of the inbound before looking for them, as quoted by the co-founder: "*We have cases that we prepare, we train the client, we do a period when we are feeding the client with the content and doing the work and sometimes we prepare the client to follow up on this process. In other words, we give the tools, we give the process, we train the client and sometimes afterwards the client then takes this job on his side. And in many other cases, the client does not want or have not competence to do it and we provide this service*". Other interviewee says that: "*We educate from the beginning like this, since when he is not a client, we start to educate about Inbound*". However, there is already a demand to provide the client with relevant information on the topic so that he can participate in the process of creating value together with the company. Thus, it can be seen that the inbound marketing methodology is effective because customers are treated as business partners and, therefore, value cocreators (Vargo & Lusch, 2009a).

In one company it is noticed that there is an absence of understanding of inbound marketing and its added value, as well as there is no mention of the use of marketing automation as an appropriate solution.

Regarding the companies' work routine, it was possible to perceive a unique and inherent characteristic of content marketing and inbound marketing actions, which is the fact that digital content is not intrinsically linked to virtual actions, but also open to other distribution networks (Rowley, 2008). This becomes evident, for example, in the case of a company whose interviewee says that the platform is disseminated through social networks. In other case the interviewee comments on the relationship with the shopkeepers as a differentiating factor: "*My great differentiation is giving the shopkeeper everything that other brands do not. I promote stores* via*Facebook and offer other marketing and advertising services*".

From the interviews two things can be seen: one is the way customers interact with companies. Currently they want to be helped and seek information that will help them in decision-making, as predicted in the theory of Halligan & Shah (2014). Likewise, despite the diversity in the data, a correspondence between the delivery stages described by each interviewee and the conceptual assumptions of Vargo and Lusch (2009a) is inferred.

When analyzing the delivery phases of inbound marketing services of all companies, two of them follow a structured logic and that is closer to what was predicted in the theory of Vargo and Lusch (2009a). According to one interviewee: "*These types of projects usually fit into our companies. The methodology that we have defined begins with a workshop that involves people who will really be able to add and place all the client's needs. And then there comes out almost a specification or a specification of what the potential project will be and what can be done and the value that will be added. And then we deliver with more or less standard methodologies from the market. And finally, it's more execution and the relationship with the customer*". On the other hand, another company follows the own methodology called "growth machine", which contains 5 fundamental steps for the relationship of partners and customers with its tool through inbound marketing: "*The first step, for example, is start generating a lead. The second step is* *to start relating to these leads in a more automated and intelligent way and the third step is to start using this relationship and this lead generation for business intelligence and the fourth step is to start selling*". In another company the automation actions propose that all interaction with its website follow the Inbound process in which the consumer needs to be informed during all phases of service delivery, as its general director puts it: "*My main objective of automation is often not to sell, my main objective of automation is to educate the value*".

By drawing a parallel with what Vargo and Lusch's theory (2009a) describes as the 4 stages of implementing inbound marketing. In the literature, the 4 steps are: (1) nurture co-production and cocreation of value with the consumer; (2) open the dialogue with him; (3) recognize that the value is unique and inherent to each client; and lastly (4) embrace learning. It is understood that even sometimes they do not follow the same order proposed by the authors, but at some point each phase happens. In the second step of the so-called "growth machine", for example, the company initiates a differentiated relationship with the lead that, even with automation, corresponds to the dialogue with the consumer also proposed in the second step of those authors. That is, there is clear practical and real evidence of what is foreseen in the literature. In the case of other companies, the fourth phase of the theory is closely related to the company's own proposal to "educate the value" in its various inbound actions.

In summary, when considering the objectives established for this second category of analysis in view of the answers given by all respondents, it is inferred once again a total correspondence with what was foreseen and discussed in the literature review and state of the art. The inbound marketing has proved to be a concept of easy understanding and used by all organizations and their caregivers. It is also verified that inbound marketing is really a strategy that improves the results of an organization by offering value. At various points in the interviews, the high level of influence of customers as marketing partners during the process of cocreating value was discussed. And finally, the 4 stages of implementing inbound marketing foreseen in the literature are present in all organizations, in one way or another, that is, with some adaptations according to the case, but in fact they exist.

5.4.2 *Marketing Automation Management*

All respondents responded that they use marketing automation as an integration tool between marketing and sales departments, improved ROI, streamlined marketing processes (waste reduction) and other improvements. This characteristic is what was observed by Järvinen and Taiminen (2016) when they stated that marketing automation is a platform that facilitates, automates and measures marketing tasks and workflows. Another important and clearly identified factor in the responses regarding marketing automation is the presence of personalization of marketing messages, which makes brand communication exponentially stronger (Halligan & Shah, 2014). This can be understood in the logic of the strategic support offered to the customer. Therefore, the automatic customization of marketing mix activities are central elements to automation and have roots in the B2B relationship. Another important factor to realize is the fact that although they do not use marketing automation to streamline processes and improve marketing results, their manager considers the platform as a facilitator that allows them to reduce the presence of "false" customers and downtime. negotiation, a crucial factor in the field of logistics.

Thus, analyzing the entire marketing automation process of the 4 interviewed companies, one can still infer another important point, that of the qualification and nutrition of leads during the sales funnel, as discussed in the literature review. One company has a strong lead tracking and qualification process structured in order to track leads throughout the funnel. But stresses that the most important thing for them is permission marketing, that is, when the prospect authorizes them to use their data to offer you better offers and retain them as customers. The marketing team generates more value when it captures data and interests of prospects without pushing solutions that they don't need.

In addition, the personalization of the message is directly related to the construction of an effective funnel that integrates marketing and sales (D'Haen & Van Den Poel, 2013), Marketing automation is present as a key activity in offering value to customers as well as in exchanging the same value with them and the other stakeholders in the process. Personalization in service delivery was emphasized in several cases by respondents as a necessary way to focus on the customer.

Likewise, it is observed that there is a clear benefit for companies in the adoption of marketing automation as well as improvement in the results as a whole for the customers they serve. We infer an almost equality in responses when we buy with the theory that states that as a result of the adoption of automation software, companies increase their conversion rate (CTR), cross- and up-selling, and the retention rate. Likewise, the latest responses confirmed the theory of Heimbach et al. (2015) that says that marketing automation complements areas such as interactive or direct marketing through the addition of automated processes. This factor of process automation is one of the main benefits reported in its Customer Service "*Standardization then allows us, in the end, to achieve greater customer satisfaction and continuous improvement of the process because we are able to perceive what are the things that are good and that are bad, through the feedback that the customer provides us in relation to the interaction you just had. So it is easier to achieve continuous improvement in these processes*", emphasizes one interviewee.

Marketing automation is an effective tool for the success of cocreating value, but it also emphasizes that it is necessary to be careful when using it. And when talking specifically about the results achieved for the company and for customers and partners, the manager adds that: "*we carry out satisfaction surveys in relation to what were the objectives at the beginning and we are perfectly aware that we have a satisfactory degree, very positive in feedback regarding the projects we have developed*". Another company in turn, has a clear benefit to customers when using marketing automation. "*The results are on two levels, which is: first saving time and hours, as we have already said and then, on a second level, it is at the prospect 's own will and availability. If I am not comfortable, if they are not going to give me little information and do not upset me, I will learn, if they already force me to have to talk to someone to learn more, I will go on with my life and I will do something else*". Therefore, no disadvantage in the use of automation by companies was identified in either case, either for internal use or to sell it as a tool to the customer.

Therefore, in general, the answers given by the interviewees, when confronted with the theory addressed in the literature review, are all confirmed. In other words, from all those companies that use or offer inbound marketing and consequent marketing automation, they believe that this type of software is beneficial, bringing clearly efficient results both for the organizations they represent and their respective stakeholders, as well as for the customer who uses the services. services by that means.

5.5 Conclusions

The main purpose of this chapter was to understand the real existence of the value cocreation in B2B by marketing automation, as a tool for delivering results, improving and facilitating marketing processes and the consequent integration in marketing and sales departments. Therefore, as a way of responding to this general objective, it was decided to identify how the value cocreation takes place in a B2B relationship. And then, in a second step, to highlight the role of marketing automation in the effective functioning of the relationship between companies. In order to achieve and respond to these objectives, 4 semi-structured interviews were conducted with managers of organizations that primarily had business with other companies and who also had experienced in the use of automation, content marketing and inbound marketing practices. From these interviews, it is possible to infer a direct correspondence with the literature, such as the importance of offering useful and relevant content to the audience through the various digital platforms available, namely the companies' website, blog, networks and email marketing.

For all marketing and sales professionals, namely those involved in digital marketing and related activities, this study provides relevant contributions in a pandemic context where physical contacts are restricted for B2B sales managers. The use of marketing automation and inbound marketing with technology assistance can facilitate B2B relationships, avoiding physical contacts.

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CHAPTER 6

Perception of Career Success in Times of COVID-19 Pandemic

Patrícia Gomes, Eulália Santos, Ana Diogo, and Vanessa Ratten

6.1 Introduction

The constant changes in the world, in terms of technology, commerce, organisational structures and the diversity of the workforce, contributed to changes in the relationship between employees and the organisation and to the notion of a career based on the traditional view (Bravo et al., 2015). Vertical promotions and wages are no longer the priority, and the primary factors for career success are autonomy, job satisfaction and continuous learning (Costa et al., 2018).

Career success has become a topic of interest, both for individuals and for organisations. This concept is increasingly evaluated through objective

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criteria, such as salary, promotions and status, and subjective criteria, such as career satisfaction (Visagie & Koekemoer, 2014).

Different countries in the world face one of the biggest obstacles of the past 100 years, a virus called SARS-CoV-2 that originated the COVID-19 pandemic. This virus started in China, at the end of 2019 (Huang et al., 2020) and, since then, it has spread to the most diverse countries worldwide. The governments of the various countries were forced to adopt extraordinary and urgent measures in order to protect the population from contamination and the spread of the virus. In Portugal, among the different measures are included the setting of work organisation rules, namely through the promotion of the teleworking regime, and health protection, hygiene and safety rules (Resolução do Conselho de Ministros no. 33-A/2020 de 30 de março da Presidência do Conselho de Ministros, 2020). The teleworking regime completely changed the work environment, the labour requirements and the relationship with the colleagues and with the managers. The World Health Organization (2020) warns of the growth of the pandemic at an alarming rate. Thus, it is estimated that in the very near future, countless transformations will occur in politics, economics, business models, social relations, culture, among others. In view of the situation experienced by the world, and in particular, in Portugal, the perception of career success may be less positive in the face of all events, given that the near future will be formed by a set of uncertainties.

The main objective of this article is to study the levels of perception of career success, and to understand which factors are most manifested in the perception of career success in pandemic times of COVID-19. In the literature, as far as we were able to ascertain, there are no studies that validate or analyse the perception of career success in Portugal, and this reason gives relevance to this investigation and an innovative character.

In structural terms, the article begins with a theoretical framework, where the concepts of career, career success, perception of career success, and objective and subjective success are addressed. In the next section, the method is presented, where the population and the sample are defined, and the data collection instrument and the procedures used throughout the investigation are described. In the results and discussion section, a statistical analysis is carried out with a brief discussion taking into account the literature review carried out. Finally, the conclusions of the study, its limitations and implications are presented, and suggestions for future investigations are listed.

6.2 Perception of Career Success

6.2.1 Career Concept

According to Super (1980), the career is the combination and sequence of positions occupied in the workplace by a person throughout life. Costa (2013) goes further, specifying that the career is not merely seen in terms of work or study, but also of "individual perceptions, attitudes and professional behaviours that result in developing skills to deal with more complex work and constantly changing situations" (p. 5). Occupational mobility, professional stability or a structured life in terms of work are also some of the characteristics that define the career concept (Costa & Vieira, 2014).

In modern times, the desire to have a lifestyle more structured and balanced between work and personal life are part of the design of career success (Baruch, 2004). In this sense, the individual builds his career, taking a more active role than before (Costa et al., 2018; Malvezzi, 2000). According to Chanlat (1995), the traditional career lasted until the 1970s and is characterised by greater stability in employment and a linear vertical progression (Baruch, 2004). Conversely, contemporary careers are unstable and their progression is discontinuous and more horizontal than vertical (Chanlat, 1995). Baruch (2004) also notes that careers are more flexible, open and less controlled by organisations. Are the individuals themselves that generate the development of their skills and their career paths (Malvezzi, 2000).

6.2.2 Career Success Concept

Judge et al. (1994) define success as the set of positive, psychological and professional results and achievements, achieved by individuals through work experiences. These authors consider that success is an evaluative concept and, as such, is influenced by the people who are judging.

When success is assessed through other people based on visible criteria, it is called objective career success (Arthur et al., 2005; Judge et al., 1994). On the other hand, the individual himself can also make a successful assessment of his path. In this case, it is called subjective success, and it can be measured through feelings of accomplishment and satisfaction (Arthur et al., 2005; Judge et al., 1994). In the context of new professional paths, Costa (2013) suggests that the career evaluation should be understood as a whole, that is, that the analysis encompasses not only his current profession, but also all the positions and functions performed by the individual throughout his professional life.

6.2.3 *Career Success Perception*

According to Robbins (2009), the perception "is the process by which individuals organise and interpret their sensory impressions in order to make sense of the environment" (p. 28). With regard to organisations, some employees may perceive their workplace as an excellent place, due to good remuneration, excellent prizes and benefits, interesting projects and/or favourable working conditions, while others see the organisation in a different way (Robbins et al., 2010). Therefore, this concept is very subjective because it depends on the experiences, motivations and interests of each individual (Robbins et al., 2010).

Costa and Vieira (2014) also note the difficulty in analysing the perception of each employee with regard to labour relations, as this involves both expectations and frustrations as performance-related factors in the workplace. For example, individuals with the same qualifications who perform the same functions may perform differently due to their perception. In this sense, the perception of career success is defined as "the person's interpretation of their achievements in relation to the different dimensions of the career" (Costa, 2013, p. 7).

To measure the perception of career success Venelli-Costa and Dutra (2011) validated a scale for the Brazilian population, which contains 48 items and a structure consisting of eleven factors: Identity, Competence, Development, Contribution, Cooperation, Creativity, Employability, Values, Hierarchy and Promotion, Compensation and Life-Work Balance.

6.2.4 *Objective and Subjective Success*

In the literature, objective career success is defined through salaries, promotions and social status (Heslin, 2005a; Judge et al., 1994). As for subjective success, it includes job and career satisfaction (Heslin, 2005b; Judge et al., 1994). Job satisfaction refers to the feelings that the employee has in relation to his work, and can be determined through the following factors: challenging and stimulating projects, fair rewards, recognition of performance, variety of tasks and autonomy (Robbins, 2009). Career satisfaction results from the individual assessment of the objectives and achievements achieved (Spurk et al., 2011).

Traditionally, career success was assessed through upward mobility and external indicators of achievement (Baruch, 2004; Poon et al., 2015; Visagie & Koekemoer, 2014). However, with the rise of modern careers, it is necessary to attach more importance to subjective factors in the evaluation of the professional path (Arthur et al., 2005), as individuals tend to take into account the level of satisfaction, the balance between work and personal life, autonomy and freedom (Baruch, 2004). In this sense, several researchers refer that the objective and subjective dimensions must be both present in the evaluation of success, and not just one of them for a better understanding of this concept (Arthur et al., 2005; Baruch, 2004; Judge et al., 1994; Poon et al., 2015).

Abele and Spurk (2009) investigated the interrelation between objective career success (performance and hierarchical position) and subjective career success (comparison with others and job satisfaction) and found that objective success positively influences subjective success at the beginning of an individual's career and that, subsequently, subjective success can influence objective success.

Dyke and Murphy (2006) interviewed 20 women and 20 men with a successful professional life and concluded that there are differences between men and women in terms of the perception of career success. In their study, the main factors that determine the career success of women are the balance between work life and personal life and healthy relationships at work and outside of it, while men valued material success.

Sturges (1999) investigated the age factor and concluded that, as manager's advance in age, they tend to evaluate their success according to subjective factors, as it is more important for them to have autonomy and influence. In the research performed by Visagie and Koekemoer (2014), the achievement of personal goals, exceeding personal and organisational expectations (i.e. contributing to the organisation and adding value to the business) and job satisfaction are present in the meaning of a successful career. In the meta-analysis carried out by Ng et al. (2005), who studied the predictors of objective and subjective career success, regarding sociodemographic variables, they concluded that the educational level and marital status (married) had a positive relationship with the career success.

To analyse the perception of objective and subjective career success, the reduced version of the scale constructed and validated by Venelli-Costa and Dutra (2011) is found in the literature (Costa, 2014). The extrinsic dimension of the scale contains items related to remuneration and hierarchical status, and the intrinsic dimension contains items that refer to competence, identity, contribution, cooperation, development, values, creativity and employability. According to the studies carried out by Pauli et al. (2016), and by Silva et al. (2019) with the use of this measurement instrument, the perception of objective career success shows an average index lower than subjective perception.

6.3 Method

6.3.1 Population and Sample

Marconi and Lakatos (2017) define population as a set of elements that have at least one characteristic in common, and define the sample as a fraction of the population. In the present study, the target population is formed by the set of Portuguese individuals in the work context, and the sample consists of 234 individuals who have the same characteristics as the population. For data collection, the non-random sampling method for convenience and snowball was used. It should be noted that this sampling method was used in the present study due to the greater ease of data collection during the pandemic period and due to cost reduction.

6.3.2 Data Collection Instrument

The instrument for data collection used in this investigation was a questionnaire survey, which consists of three parts: perception of career success, sociodemographic data (gender, age, education, marital status and whether you have children) and professional data (sector of activity, length of service and size of the organisation).

To evaluate the Perception of Success in Career (CSP), the reduced version of the scale validated by Costa (2014) was used with minor changes in terms of semantics in order to improve the participants' interpretation. The CSP reduced scale is composed of two dimensions: Extrinsic (items 1, 2, 3, 4 and 5) and Intrinsic (items 6, 7, 8, 9 and 10), and its items are shown in Table 6.1. To measure responses, a five-point Likert-type agreement scale was used (1- Strongly disagree to 5- Strongly agree).

Table 6.1 Descriptive measures of items on the career success perception scale

	M	SD	Sk	Ku
It1. I have received fair rewards compared to the other people I know (not just in my field)	2.51	1.26	0.308	−0.999
It2. The remuneration I receive for my professional activities is fair, so I have already invested in my career	2.38	1.21	0.501	−0.737
It3. I am calm about my future regarding my financial and material needs	2.51	1.19	0.400	−0.643
It4. My income meets my needs and those of my dependents	2.74	1.21	0.090	−0.852
It5. The professional prestige (or status) of my hierarchical position is in line with my interests	2.70	1.24	0.173	−1.001
It6. I am proud of what I do professionally	3.96	1.14	−0.872	−0.120
It7. The tasks that I currently perform in my career comprise a wide variety of tasks	4.05	1.03	−0.967	0.275
It8. I have created important innovations during my professional career	3.44	1.20	−0.320	−0.815
It9. I am constantly learning and developing in my career	3.80	1.14	−0.729	−0.296
It10. Tasks that currently develop in my career require a high level of competence	3.81	1.07	−0.765	0.032

Source Own elaboration

6.3.3 Procedures

In this investigation, the Internet was used to collect data in order to make the process more agile, efficient, effective and reach a larger number of participants. In this way, the Google Forms tool was used to create the questionnaire, the link of which was shared on the social networks Facebook and WhatsApp and sent by email to the individuals to respond. Note that the link was shared by individuals from different regions of Portugal. Data collection started on August 6 and ran until August 26, 2020. The participants were informed of the objectives of the study; the guarantees regarding the anonymity and confidentiality of the data were given to them, having been emphasise that the data would only be used for statistical purposes of the present investigation.

For the statistical treatment of the data, the software IMB SPSS Statistics 25 and AMOS 21 was used, allowing the analysis of descriptive statistics and structural equation models. The sample was characterised by calculating means, standard deviations and frequency tables.

According to Kline (2015), the existence of missing cases, outliers and item sensitivity were checked using the asymmetry ($|Sk| \leq 3$) and flattening ($|Ku| \leq 7$) coefficients. The factorial validity of the model was assessed using the techniques of exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). In the EFA, the Kaiser-Meyer-Olkin sample adequacy index was used (KMO > 0.8 reveals good sample adequacy) and the Bartlett sphericity test ($p < 0.05$) to check the suitability of the application to the sample (Pestana & Gageiro, 2014). The principal component method was used to extract the factors, with varimax rotation (factor loads with values above 0.50 are considered satisfactory), and the Kaiser criterion to measure the minimum number of factors to retain (eigenvalues greater than 1). With the CPA (maximum likelihood estimation method), the adequacy of the structure that emerged from the EFA was tested. The adjustment quality indexes (Marôco, 2014) used were as follows: the reason of the Chi-square statistics for degrees of freedom ($\chi 2/df$) it is considered a good adjustment if it presents values between 2 and 3; RMSR (Root Mean Squared Residual) which, in general, presents values below 0.08 is a good indicator; GFI (Goodness of Fit Index); NFI (Normed Fit Index) and CFI (Comparative Fit Index) greater than 0.9 are indicators of good adjustment; and RMSEA (Root Mean Square Error of Approximation) is considered good for values in the range [0.05, 0.08]. To assess the parsimony of the models, the comparative adjustment index MECVI (Modified Expected Cross-Validation Index) and the chi-square adjustment difference test were used (Marôco, 2014).

Reliability was assessed by calculating Cronbach's alpha values and composite reliability. If these measures have values greater than 0.7, they are considered acceptable. The convergent validity was estimated by the value of the AVE (Average Variance Extracted), which must present values greater than 0.5; to analyse the discriminant validity, it was verified if the AVE values were higher than the square of the correlation between the factors (Hair et al., 2014).

To determine whether sociodemographic and professional variables interfere with the perception of career success, the technique of statistical inference was used: the Student's t test to compare two independent samples, ANOVA (Analysis of Variance) to compare more than two independent samples (whenever significant differences were found through ANOVA the Scheffe multiple comparison test was used), and Pearson's correlation to analyse relationships between variables (Marôco, 2018).

6.4 Results and Discussion

6.4.1 Sample Characterisation

The sample consists of 234 individuals aged between 20 and 79 years old, with an average (M) age of approximately 43 years ($SD = 10.60$). The vast majority of the participants are female ($n = 141$, 60.3%). With regard to educational qualifications, 70.5% ($n = 165$) have higher education and 29.5% ($n = 69$) do not have higher education. Regarding the marital status, 141 (60.2%) individuals are married or live in a de facto union, 65 (27.8%) are single and 28 (12.0%) are divorced/separated or widowed. Most of the individuals have children (63.7%, $n = 149$).

The length of service in the organisation varies between one month and 50 years, with an average of approximately 13 years ($SD = 11.46$). Most individuals perform functions in the tertiary or services sector (76.1%, $n = 178$) and the rest in the secondary or industry sector (23.9%, $n = 56$). Regarding the size of the organisation, 35.5% ($n = 83$) of respondents work in a large company, 23.1% ($n = 54$) in a medium company, 21.3% ($n = 50$) in a micro enterprise, and 20.1% ($n = 47$) in a small company.

6.4.2 Descriptive Analysis of Items on the Career Success Perception Scale

Table 6.1 shows the averages of the different items on the Career Success Perception Scale. The scale items under analysis range from 1 to 5, where 3 is the midpoint of the scale. Thus, it appears that the first five items in Table 6.1 do not demonstrate a positive perception, as they present average values significantly lower than 3 ($p < 0.01$) and the remaining items have averages significantly higher than 3 ($p < 0.01$), so they demonstrate a positive perception. Regarding the sensitivity study, it appears that all items have asymmetry coefficients ($|Sk| \leq 0.967$) and flattening ($|Ku| \leq 1.001$) within the parameters to assume the assumption of normality.

6.4.3 Exploratory Factor Analysis

For the Career Success Perception Scale, exploratory factor analysis was applied. The Kaiser-Meyer-Olkin (KMO) measure and the Bartlett's Sphericity test revealed a good sample fit ($\chi^2(45) = 1191.924$, $p < 0.001$, KMO = 0.856). The factorial solution is found in Table 6.2 and

Table 6.2 Matrix of factorial loads and communalities of the career success perception scale

	Dimension		h^2
	1	*2*	
It2. The remuneration I receive for my professional activities is fair, so I have already invested in my career	0.856		0.754
It3. I am calm about my future regarding my financial and material needs	0.803		0.681
It4. My income meets my needs and those of my dependents	0.772		0.658
It5. The professional prestige (or status) of my hierarchical position is in line with my interests	0.758		0.694
It1. I have received fair rewards compared to the other people I know (not just in my field)	0.740		0.576
It7. The tasks that I currently perform in my career comprise a wide variety of tasks		0.799	0.645
It10. Tasks that currently develop in my career require a high level of competence		0.784	0.666
It9. I am constantly learning and developing in my career		0.767	0.639
It8. I have created important innovations during my professional career		0.762	0.643
It6. I am proud of what I do professionally		0.713	0.581
Eigenvalues	3.340	3.198	
% Explained variance (65.38%)	33.40%	31.98%	
Cronbach's alpha	0.875	0.853	

Source Own elaboration

presents a structure made up of two dimensions that explain, together, 65.31% of the total variance. The first dimension, named Objective Success Perception, explains 33.40% of the variance and consists of five items, and the second dimension, named Subjective Success Perception, explains 31.98% of the variance and is also composed of five items. Cronbach's alphas values for the dimensions of the Career Success Perception Scale are greater than 0.80, which is considered an indicator of good reliability. It should be noted that Cronbach's alpha values are higher than those obtained by Costa (2014) when validating the scale for the Brazilian context (0.81 and 0.80 for the extrinsic and intrinsic dimension, respectively).

6.4.4 Confirmatory Factor Analysis

Confirmatory factor analysis was applied to the structure obtained through exploratory factor analysis, and it was found that some of the indicators did not present a good adjustment ($\chi^2 = 135.334$, $df = 34$, $\chi^2/df = 3.980$, $p < 0.01$, RMSR = 0.073, GFI = 0.902, NFI = 0.888, CFI = 0.913, RMSEA = 0.113, MECVI = 0.770). In order to improve the adjustment of the model, four trajectories between residues were added (because they are correlated) and the adjustment indexes of the model have already shown a good quality of adjustment ($\chi^2 = 62.103$, $df = 30$, $\chi^2/df = 2.070$, $p < 0.01$, RMSR = 0.053, GFI = 0.950, NFI = 0.949, CFI = 0.973, RMSEA = 0.068, MECVI = 0.492). It should be noted that the modified model presented an adjustment quality significantly superior to that of the model initially applied to the sample ($\Delta\ \chi^2 = 73.231 > \chi^2_{0.95,(4)} = 9.488$) as well as the MECVI value considerably better ($0.492 < 0.770$). Figure 6.1 shows the structure of the model, where it can be seen that it is composed of the dimensions Objective Success Perception (OSP), consisting of five items (It1, It2, It3, It4 and It5) and Subjective Success Perception (SSP), which also integrates five items (It6, It7, It8, It9 and It10), and it is in line with the provisions of the study by Costa (2014). Standardised factorial weights are greater than 0.5 (range from 0.591 to 0.839) and individual reliability are greater than 0.25 (range from 0.349 to 0.703). Objective Success Perception dimension manifests itself with greater intensity in professional prestige (or status) ($\beta_{It5} = 0.84$) and Subjective Success Perception dimension manifests itself with greater intensity in learning and career development ($\beta_{It9} = 0.80$).

Composite reliability values ($CR_{OSP} = 0.861$ and $CR_{SSP} = 0.839$), as well as the values of Cronbach's alphas (Table 6.2) of the dimensions of the Career Success Perception scale are greater than 0.80, which is considered good reliability. AVE values ($AVE_{OSP} = 0.556$ and $AVE_{SSP} = 0.513$) are greater than 0.5, which indicates adequate convergent validity. The correlation among the factors is significant and positive ($r = 0.626$, $p < 0.001$), which justifies the existence of a second-order hierarchical factor. As AVE values are greater than the square of the correlation between the factors ($r^2 = 0.392$) there is evidence of discriminant validity. According to Abele and Spurk (2009), there is an interrelation between objective and subjective dimensions, as verified in the present work.

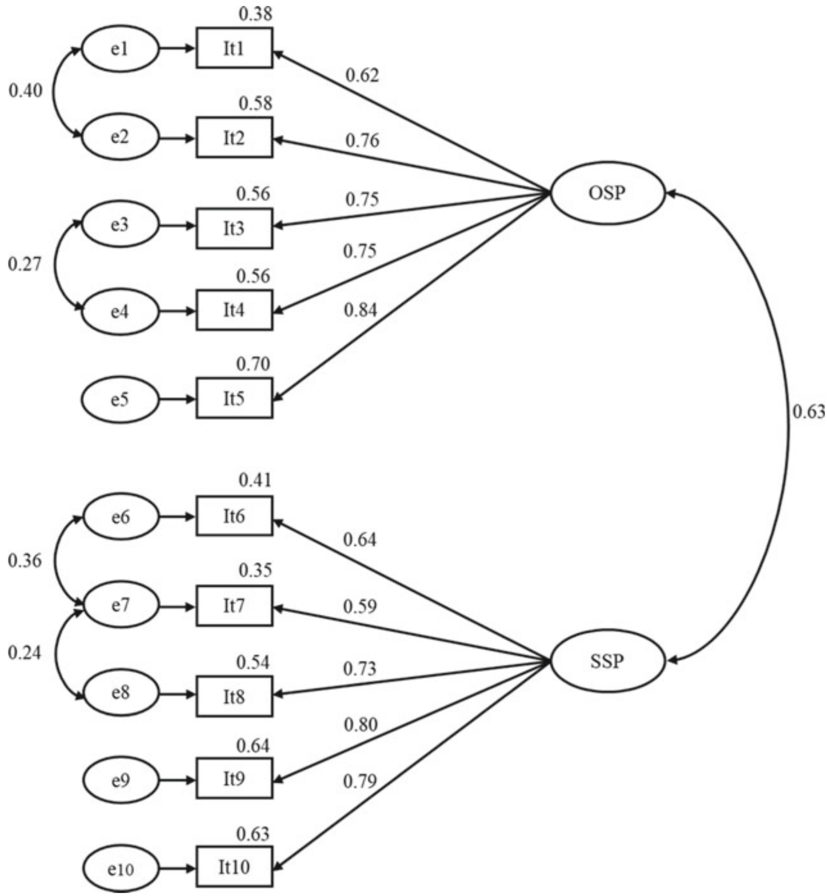

Fig. 6.1 Career success perception scale measurement model (*Source* Own elaboration)

6.4.5 Structural Model

Figure 6.2 presents a structural model for the perception of career success whose values of quality of adjustment are considered good. AVE value for the variable Success Career Perception (SCP) is 0.628, higher than 0.5, which, according to Hair et al. (2014), is an indicator of adequate

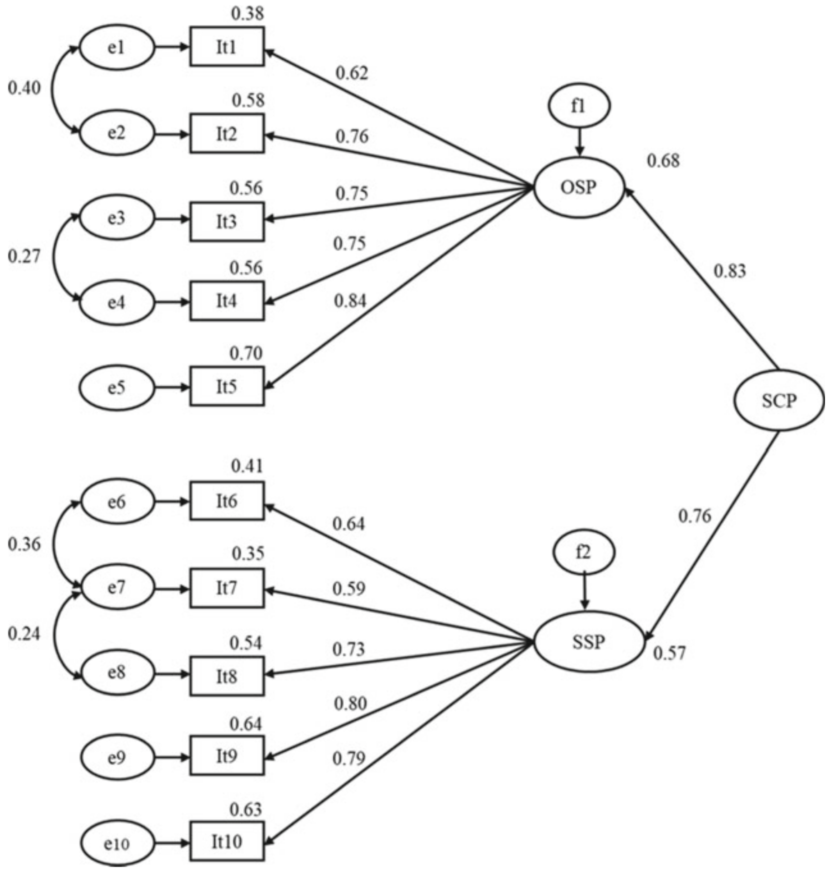

Fig. 6.2 Structural model for the career success perception scale (*Source* Own elaboration)

convergent validity. The perception of career success manifests itself with greater intensity in the dimension of Objective Success Perception ($\beta = 0.83$).

6.4.6 *Descriptive Analysis of the Factors of the Career Success Perception Scale*

The representative variables of the two factors OSP and SSP and the SCP scale were calculated using the scores obtained in the Factor Score Weights matrix. In general, the perception of career success does not show a positive perception ($M = 1.94$, $SD = 0.54$). The Subjective Success Perception factor has higher values ($M = 3.64$, $SD = 0.90$) compared to the Objective Success Perception factor ($M = 2.06$, $SD = 0.72$), which is in line with the studies by Silva et al. (2019) and by Pauli et al. (2016).

By calculating Pearson's correlation coefficients, a statistically significant and positive relationship is found between age and the perception of career success ($r = 0.19$, $p < 0.01$) and also between age and the OSP factor ($r = 0.15$, $p < 0.01$) and SSP factor ($r = 0.22$, $p < 0.01$), which means that the older the individuals, the higher the rate of perceived success in their careers. Also, Sturges (1999) in his study concluded that, as manager's advance in age, they tend to evaluate their success according to subjective factors. According to Judge et al. (1994), older managers receive more promotions in their careers than younger managers.

Next, Student's t test for independent samples was applied to compare the perception of success between men and women, and between those who have and those who do not have children, and between those who have and those who do not have higher education. Table 6.3 shows that there were no statistically significant differences between men and women ($p > 0.05$). However, concerning sampling terms, it can be observed that men have higher rates of perception in career success. Unlike the present study, Dyke and Murphy (2006) concluded that there are differences in the perception of success between men and women.

There were also no statistically significant differences in the perception of career success between individuals who have and those who do not have children ($p > 0.05$). However, in sample terms, individuals with children show higher rates of perception of career success.

There were statistically significant differences in the perception of career success and in its OSP and SSP factors between individuals who have and who do not have higher education ($p < 0.01$), it is possible to infer that individuals with higher education have higher rates of perceived success in their careers. These facts are in line with the study by Ng et al. (2005) who states that the level of education is related to career success.

Table 6.3 Perception of career success between men and women

	Gender				
	Female ($n = 141$)		Male ($n = 93$)		
	M	*SD*	*M*	*SD*	*t test*
OSP	2.04	0.71	2.09	0.74	−0.536
SSP	3.57	0.92	3.75	0.87	−1.448
SCP	1.91	0.54	1.99	0.54	−1.05
	Children				
	No ($n = 85$)		Yes ($n = 149$)		
	M	*SD*	*M*	*SD*	*t test*
OSP	2.03	0.67	2.08	0.75	−0.526
SSP	3.57	0.87	3.68	0.92	−0.936
SCP	1.9	0.5	1.97	0.56	−0.863
	Literary Qualifications				
	Do not have higher education ($n = 69$)		Higher education ($n = 165$)		
	M	*SD*	*M*	*SD*	*t test*
OSP	1.85	0.66	2.15	0.73	−3.025**
SSP	3.37	0.92	3.75	0.87	−2.990**
SCP	1.78	0.52	2.01	0.53	−3.055**

Note OSP = Objective Success Perception; SSP = Subjective Success Perception; SCP = Success Career Perception

**$p < 0.01$

Source Own elaboration

Table 6.4 Perception of career success among civil states

	Single (n = *65)*		*Married/Union of fact* (n = *141)*		*Divorced/Separated/Widowed* (n = *28)*		
	M	SD	M	SD	M	SD	*ANOVA*
OSP	2.00	0.69	2.14	0.73	1.79	0.72	0.940*
SSP	3.50	0.94	3.76	0.84	3.39	1.07	1.502*
SCP	1.87	0.53	2.01	0.52	1.77	0.59	3.426*

Note OSP = Objective Success Perception; SSP = Subjective Success Perception; SCP = Success Career Perception

**$p < 0.01$

Source Own elaboration

Through the application of ANOVA (Table 6.4), it was found that there are statistically significant differences in the perception of career success between different civil states ($p < 0.05$). Note that Scheffe's multiple comparison test did not show significant differences. In sample terms, it can be seen that individuals who are married or living in a de facto union are those with the highest rates of perceived success in their careers. Also, according to Ng et al. (2005), being married has a positive relationship with career success.

The application of Pearson's correlation shows that there is a statistically significant and positive relationship between the length of service and the perception of career success ($r = 0.19$, $p < 0.01$) and also between age and OSP ($r = 0.12$, $p < 0.05$) and SSP factors ($r = 0.25$, $p < 0.01$), which means that the perception of career success grows as the years of service increase.

Table 6.5 shows that there were no statistically significant differences in the perception of career success between the service sector and the industry ($p > 0.05$). However, in sample terms, it can be seen that the industry sector has higher rates of perceived objective success and career success. In terms of perception of subjective career success, the highest rates are obtained in the services sector.

To compare the perception of career success between the types of organisation, ANOVA was applied (Table 6.6), and it was found that there are no statistically significant differences ($p > 0.05$). However, in sample

Table 6.5 Perception of career success between the services sector and industry

	Sector				
	Industry		*Services*		
	(n = 56)		*(n = 178)*		
	M	SD	M	SD	t test
OSP	2.17	0.79	2.03	0.70	1.331
SSP	3.59	1.00	3.66	0.87	-0.485
SCP	1.98	0.60	1.93	0.52	0.542

Note OSP = Objective Success Perception; SSP = Subjective Success Perception; SCP = Success Career Perception
Source Own elaboration

Table 6.6 Perception of career success between the organisation type

	Micro company (n = 50)		*Small company (n = 47)*		*Medium company (n = 54)*		*Large company (n = 83)*		
	M	SD	M	SD	M	SD	M	SD	*ANOVA*
OSP	3.49	0.91	3.79	0.92	3.68	1.00	3.63	0.82	0.940
SSP	1.87	0.53	2.06	0.57	1.99	0.58	1.89	0.49	1.502
SCP	1.99	0.68	2.25	0.77	2.15	0.77	1.94	0.67	2.297

Note OSP = Objective Success Perception; SSP = Subjective Success Perception; SCP = Success Career Perception
Source Own elaboration

terms, it can be seen that individuals who work in small and medium-sized companies have higher rates of perceived career success.

6.5 Conclusion

To achieve the objective initially proposed in the present study, a sample of 234 Portuguese individuals in the context of work was used. The career success perception scale showed evidence to be considered with factorial, convergent and discriminant validity and with adequate reliability. The scale is composed of two factors that we labelled objective success perception and subjective success perception. In general, individuals show a more positive perception regarding the subjective perception of success when compared to the perception of objective success. It was also found that the perception of career success manifests itself with greater intensity in the perception of objective success, and it has been revealed that the perception of career success does not prove to be positive.

The index of perceived career success increases with age. Regarding gender, and those who have or do not have children, there were no statistically significant differences in the perception of career success.

Individuals with higher education have higher rates of perceived career success when compared to those without higher education qualifications. Individuals who have more years of service tend to have higher levels of perception of career success.

No statistically significant differences were found in career success perception between the different company's types. However, in sample terms, individuals working in small and medium-sized companies showed higher rates of perceived career success.

It is expected that this study will contribute to the increase of scientific knowledge in the area of human resources for career success. This study contributes to the area of human resource management in the perspective that organisations must take into account the expectations of individuals and their motivations. It can also help the government to implement strategies that improve career management.

The importance of a comparative study in a post-pandemic context is emphasised, when people's concern for the future is less. In future studies, it is intended to test in the Portuguese population whether workaholism influences the perception of career success.

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CHAPTER 7

Exploratory Analysis of the Christmas Symbology Importance

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7.1 Introduction

Christmas day on December 25 is one of the biggest feasts of the Christian world, even though it is one of the latest instituted by the church, for it only began to be observed towards the end of the fourth century, according to Conybeare (1899). This was controversial: while

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some defended this feast was ultramodern and introduced late, which raises some questions, some believed the nativity of Christ was long foretold. Because of this, initially, only the western half of the globe celebrated Christmas by the end of the fourth century.

Murta and Sanson Junior (2015) refer that there is a set of feasts and a plot of liturgical references: it begins in Advent, passes through the peak, Christmas (December 25) and reaches Epiphany (January 6). For these authors, Christmas, as it is seen today, is the Christianization of a pagan feast. Cruz (2013) explains that the nativity of Jesus divided the history of the world and humanity into before and after, and this is the reason for the Christmas feast. Usually, people wish Merry Christmas, and in the past, cards with Merry Christmas wishes were sent, which had images allusive to the nativity scene, i.e. with the scene of the nativity of Christ in Bethlehem.

In the words of Cruz (2013), Christmas is turning into a secular feast, where sometimes family no longer gathers. Christmas typicality tends to disappear, and it becomes mechanized, in a season of consumption, waste and sometimes luxury. Today there is a disenchantment of Christmas due to a crescent religious erasure of Christ's Christmas and thus desecrating the celebration of winter's arrival. Alternatively, Faria (2013) refers that Christmas possesses its symbolic representations and all symbols convey content. Christmas symbols are associated with moral values, passed on for two thousand years.

Christmas is in winter, but it is by fall that it starts to "smell like Christmas" (Canhoto, 2018). It is the season of dry fruits and the colour of the trees' leaves change, which attracts people to take long walks. However, people also fancy staying at home, by the fireside eating chestnuts with wine. It is the time to decorate the Christmas tree with all the lights and colours, and sometimes with stars, balls, bells and angels, while the tree, nowadays, is frequently artificial. The historical centres of the towns and villages are illuminated by Christmas lights and a festive moment is lived, accompanied by Christmas songs.

Portugal is a country full of culture, traditions and rituals, where families give plenty of importance to this holiday. Families come together on December 24 and eat the traditional bacalao, although roasted turkey and other meat dishes are also on the menu. And for dessert, the King Cake must be present, full of crystalised fruit or of dry fruits, besides traditional fried desserts, like sweet fritters and French toasts. Thus, it becomes pertinent to develop studies about Christmas, because it is a traditional festive season which people experience with intensity.

The purpose of this chapter is to study the Christmas symbology importance and its relationship with consumerism in the Christmas season. To accomplish this goal, beyond this introduction, the literature review is presented next. In the third section, the methodology is exposed. The fourth section presents the results and their discussion. Finally, conclusions are exhibited.

7.2 Literature Review

7.2.1 Historical Facts

Rocha (2012) explains that Christmas is an originally roman feast, which posteriorly extended through the East. The nativity of Christ is briefly described in the canonical gospels as the birth of a child in the humblest of settings and with the unique appearance of the angel, who transmits the event's extraordinary dimension.

Roque (2013) points out that, in the absence of concrete references, the conjecture about the date of the nativity of Christ became a topic of discussion which was maintained in the following centuries. It is estimated that Christ was born between years 7 and 2 BC. This author also refers that December 25 was fixed late, and its oldest reference appears in the year 354. December 25 matches the winter solstice in the Roman calendar and is justifiable by the secrecy between Christianity and the solar cults of Mitras and Sol Invictus in the Roman empire. According to Roque (2013), the decisive factor for setting the Christmas feast is the incarnation date, which was celebrated in the West on March 25 since the third century and matches the spring equinox. Thus, counting the nine months gestation period from this date, Christmas occurs on December 25, this being the date on which Pope Liberius (352–366) established Christmas. In the symbol of light, the spring equinox adds the meaning of life, through germination and renovation. The equinox marks simultaneously the death of Christ, because in the third century the day of the Passion and the Conception of Christ were considered identical.

In the words of Rocha (2012), the word in Portuguese for "nativity scene" comes from the Hebrew and means "manger", which is the place where, according to the gospels, Jesus was born. The artistic representation of the nativity of Christ is also called the nativity scene, where he is portrayed in a stable, accompanied by Virgin Mary, Saint Joseph, a cow, and a donkey. Sometimes, figures like shepherd, sheep, angels and the biblical Magi are added. In Portugal, the nativity scenes are exhibited in churches, private houses and in many public places.

For Roque (2013), the iconography of the nativity scene was consolidated because of the long tradition of medieval dramatizations and plastic figuration proposed by Francis of Assisi: Baby Jesus lying over the manger straws, between Virgin Mary and Saint Joseph, accompanied by the caw and the donkey, which contribute to contextualize the gospel's words. Starting from the XV century, with the constant humanization of religious themes, the biblical Magi reflected the donators and respective royal court, displaying luxurious vests and wealthy adornments. Posteriorly, the pastors' worship appeared in the renaissance era. Meyer (1977) refers that the Bethlehem star which leads the biblical Magi towards Baby Jesus is a central Christmas symbol. Barth (2000) explains that at the top of a Christmas tree there is always a star. Before Christmas, stars already had an important role in other religions; however, the five-pointed star of Christmas is unique. When Jesus was born, a star which led the biblical Magi towards Him appeared.

For Rocha (2012), although the creation of nativity scenes is attributed to Francis of Assisi, the truth is that nativity scenes, as they are known today, only emerged three centuries later. According to the author, Francis of Assisi gave an undebatable contribution to the growth in the interest in recreations of the nativity scene and for their development. In Portugal, the recreations of the nativity scene began in the fifteenth century, with King D. João II playing an important role, as well as Portuguese craftsmen, who developed and perfected the art of nativity scenes. Later, nativity scenes became the most important Christmas symbol, being included in every home.

7.2.2 The Evolution of the Christmas Celebration

The European winter has long days and short nights, and people live looking for light, colour and warmth. In this European winter, human and interior warmth motivated wishes and moments of reunions and encounters, as well as ways of spending time together experimenting or remembering delicious recipes by the fireside with friends and family

(Demetresco, 2010). Therefore, the cold weather is one of the reasons why Christmas markets in Northern Europe are so charming. Demetresco (2010) refers that the first documented nativity scene was built by Francis of Assisi in 1223, in the Church of Greccio, Italy. Nativity scenes built on wood, stone, porcelain, silver, and clay were created and recreated over the centuries. Nowadays, Christmas markets still exist and sellers use typical clothing, while in these markets fun prevails, as well as the sale of ornaments, sweets, gravies and wines, which distract people and heat up the cold winter nights with colours and lights.

Nonetheless, some of the original characteristics may have been lost over time. In the words of Cruz (2013), nowadays, "Merry Christmas" postcards present different images, since one finds in them all sorts of balls, sequins, lights and ornaments, but no reproduction of renowned paintings about the nativity of Christ, which were painted throughout history. For Cruz (2013), Christian Christmas baptized a pagan feast, and over time this alliance of spirituality and worldliness have always been linked together. In Portugal, it is associated with cold weather, burning wood in the churchyard in the village, nativity scenes, bells parties and popular music. The enchantment of Christmas is due to the season of the year it is celebrated on, as it is shown by the usage of dried fruits (pine nuts, walnuts, almonds, figs) and sweets (French toasts and sweet fritters). It is the children's party and the celebration of the nativity of Christ. Christmas is regarded as an announcement of peace on Earth and the absence of conflicts.

Faria (2013) registered that, in England, it is usual to say that Christmas was invented by Charles Dickens, because he planted Christmas celebrations in the children's imagination. The bond between Dickens and Christmas arises from the publications which became extraordinarily popular and keep on maintaining magic today. Dickens captured Christmas spirit in its various facets. One example of that is the nativity scene, which is fundamental in Christian homes, but that was not represented in Protestant homes.

For Faria (2013), while the Christmas tree in Portugal has its origin in Germany, "Merry Christmas" postcards were an English invention. The first Christmas postcard wishing a "Merry Christmas" was designed in 1843 by Sir Henry Cole, and in 1880 the "Merry Christmas" postcards industry was highly profitable. According to Canhoto (2018), the Christmas tree tradition began in the XVIII century with D. Fernando, the husband of Queen D. Maria II, "The Educator". She was from

Germany and brought a German tradition to Portugal. Christmas is the time when Christmas trees are decorated, while nowadays, the Christmas tree is generally artificial. Pettersson et al. (2020) refer that in Norway, the existence of a good Christmas tree in the families' homes is so important that there are breeding programmes for the existing species. However, postharvest needle retention has not been a criterion of the breeding programmes. In Scandinavia, there is a clear demand for traditional, domestically produced and low environmental impact Christmas trees, and poor postharvest needle retention is one of the factors that lead consumers to prefer to buy artificial trees.

Batinga et al. (2017) explain that materialism is the importance that a consumer gives to worldly goods. These goods assume nuclear aspects in people's lives, being satisfaction or dissatisfaction sources. Materialism is also connected with consumption, and the customer's satisfaction is sustained on the reaction it may cause on another person and in the utility of the good/service one acquires. Moreover, it is associated with the search for status. About Christmas consumption, materialism is closely connected with the concept of possession, but also with the act of gifting. Possessing goods is in the essence of the concept of materialism, and that possession may be granted not only by the purchase but also by the good's consumption and its acquisition through receiving it as a gift.

For Batinga et al. (2017) there is a significative difference between materialism and secularism at Christmas. However, both are observable during this season, because consumption requests and the given emphasis on Christmas purchases start in October and can be seen in supermarkets, shopping centres, showcases, among others. Tavares et al. (2014) refer that shopping centres are sought mainly during winter due to the less enjoyable days, but also because of the high consumption season that is felt during Christmas. Batinga et al. (2017) point out that Christmas secularization is associated with the formalization of its image. One of the elements that point towards the secularization of Christmas is the image of Santa Claus. Santa Claus can also be seen under the meaning of sanctifying the act of gifting children, distinguishing them from presents from other important dates throughout the year. During this season, Santa Claus is the centre of attention. Even so, Hall (2014) refers that the image of Santa Claus without snow and reindeer is not part of the Christmas realm imagined by millions of people in the globe.

According to Batinga et al. (2017), there are two angles on the drawings and plots of children: on one hand, these are linked to Christian tradition, which regards positive attitudes and values; on the other hand, the drawings and plots point towards aspects which configure materialism and secularism, reproduced into Christmas symbols, such as the consumption of gifts and decoration items, which deviate from the true meaning of the date. Santa Claus appears in them all and is also illustrated on gifts, representing a utilitarian relationship, since he is the gift donator. Cleeve (1958) refers that Christmas decorations can be very expensive items and thus can additionally strain an overtaxed and short budget. Therefore, elements like pine cones may be combined with decorative elements (candles, ribbons) to produce beautiful ornaments. Ollerton et al. (2016) say that mistletoe can be semi-domesticated and has a strong cultural and symbolic connection with Christmas in northern Europe countries. Holly wreaths have the interpretation of being composed of the symbol of the blood of Christ (berries) in the middle of the holly wreath (the sharp leaves). Moreover, they are an ancient symbol of fertility, and consequently, people became interested again in them in the XVIII and XIX centuries. In 2014, the British citizens spent 623 million pounds in Christmas decoration, and a small, but significative part was in decorations that include mistletoe.

Storni and Estima (2010) have studied religious commodification, in its version of transforming spirituality in consumer products. According to the authors, the referred culture appeared along with the cities and the urban habits of sociability. Hence, dates to stimulate purchases and make feasts have been created, such as Christmas, birthdays, Easter, among others.

Furthermore, Lauritsen et al. (2018) refer that little is known about the genesis of the events and the reason why turkey is associated with Christmas. In many cultures, the importance of cattle goes beyond consumption. Exotic animals are anthropologically seen as better and superior, and therefore it makes sense that turkey, which is not native to England, is a Christmas symbol. However, this possibility is difficult to test, due to difficulties dating mortal remains and identifying different species. For Lauritsen et al. (2018), some of the primordial historical evidence of Christmas in England is found in the Anglo-Saxon calendar system: approximately in October, for both practical and religious reasons, there were cattle sacrifice ceremonies, dedicated to pagan gods. In the writings of Bede about that season, the word “Christmas” does not appear; alternatively, there are references to the day in which “the nativity of the Lord is celebrated”. On the other hand, written documents suggest that turkey was introduced in Europe through Spain and Italy next, in the first 20 years of the XVI century. Being an exotic animal, only elites utilized it as a food for feasts, since they were generally used for exhibition purposes.

Rakow (2019) mentions that there is a popular perception in the western world that Christmas is only celebrated in the north of the western hemisphere. Christmas celebrations had a first globalization wave with the Christian missionary movements, and a second wave motivated by global capitalism and event culture. Rakow (2019) refers that in Singapore there is a lot of tourism during Christmas, due to the famous "Orchard Road", where Christmas markets exist and are a place to purchase items and food and to entertain people. These are luxuriously decorated and many street artists, dancers and Christmas carols singers, who entertain customers in their purchases, are present. Customers share many pictures on social media, which triggers international acknowledgement of the area as a touristic destination. Although decorations on "Orchard Road" can include religious figures and the Christmas carols that are heard can celebrate the nativity of Christ, the event deviates itself from its religious content. As a result of that, an organization (Celebrate Christmas in Singapore—CCIS) that feels that the true meaning of Christmas has been lost was founded, seeking to bring a message of love and happiness to the public. Christmas carols are seen as a way to spread Christmas' message without needing to further explain its content, while also constituting a short moment of fun for passers-by. A theatre play of 20 minutes which shows people "the true meaning of Christmas" was also organized, showcasing that it is not just a pause in the mundane lives of families, frequently used for holidays or to share happiness in the form of gifts: it possesses an underlying religious meaning filled with true love and happiness.

7.3 Methodology

7.3.1 Population and Sample

In this study, the target population is Portuguese over 18 years old. To collect data, to inquire the participants, the method of non-random sampling by convenience was utilized, due to the associated low sample cost and the easiness of access to the sample elements.

After applying the questionnaires, 1086 individuals with ages between 18 and 73 years, with the average of approximately 36 years ($SD = 12.35$) were considered for analysis. The individuals are predominantly females (56.1%, $n = 609$). Regarding education level, 47.6% ($n = 517$) have a bachelor's degree, 25.6% ($n = 278$) studied until the 12th grade, 22.4% ($n = 243$) have a master's degree or a Ph.D. and 4.4% ($n = 48$) studied up to the 9th grade. As far as marital status is concerned, 45.9% ($n = 498$) are single individuals, 45.2% ($n = 491$) are married or are in a common-law marriage and the remaining 8.9% ($n = 97$) are separated, divorced or widowed. About the monthly income of the household, 41.2% ($n = 447$) earn between 1001 and 2000 euros per month, 23.8% ($n = 258$) make between 2001 and 3000 euros per month, 17.7% ($n = 192$) bring in more than 3000 euros per month and 17.4% ($n = 189$) earn up to 1000 euros per month. Regarding religion, in this study, 87.1% ($n = 946$) are Christian, 9.6% ($n = 104$) are atheists and 3.3% ($n = 36$) are from other religions. Most of the individuals do not have direct family with ages below 16 years (60.5%, $n = 657$).

7.3.2 Data Collection Instruments

The utilized methodology is quantitative, and it is based on a questionnaire survey which consists of three parts. In the first part, respondents indicate how much they are expecting to spend on gifts and on consumer goods for their Christmas in 2019. In the second part, the importance of diverse symbols associated with Christmas is analysed, and in the third and final part, the sociodemographic profile of the respondents is evaluated: gender, age, education level, marital status, religion, monthly income of the household and whether or not they have dependent family members whose age is less than 16 years.

Eleven Christmas symbols were considered through literature review: the nativity of Baby Jesus (Cruz, 2013); Santa Claus (Batinga et al., 2017); nativity scene (Demetresco, 2010; Rocha, 2012; Roque, 2013); Santa Claus, sleigh and reindeer (Hall, 2014); Christmas tree (Faria, 2013; Pettersson et al., 2020); Christmas lights (Cruz, 2013); Christmas decorations (Cruz, 2013); Christmas star (Barth, 2000; Meyer, 1977); Christmas carols (Rakow, 2019); mistletoe (Ollerton et al., 2016) and pine cones (Cleeve, 1958). To analyse their importance, a fivr-point Likert scale was utilized (1—*It is not important* to 5—*It is very important*).

7.3.3 Procedures

The questionnaires were applied to Portuguese people over 18 years of age, between December 1 and 23 of 2019. These were presented to the participants alongside a short introductory summary, which defined the objectives of the study and ensured the anonymity and confidentiality of the provided information.

To characterize the individuals' profile and carry out some descriptive analysis, descriptive statistics were used, by utilizing the IBM SPSS Statistics 25 software.

Initially, the existence of outliers was analysed, and the items sensitivity was evaluated using the skewness ($|Sk| \leq 3$) and kurtosis ($|Ku| \leq 7$) coefficients, according to the indications of Marôco (2018). The factorial validity of the model was assessed using the technique of exploratory factor analysis, since a structure for the set of symbols is wanted, without determining how the results adjust to a model. According to Pestana and Gageiro (2014), to ascertain the suitability of the exploratory factor analysis applied to the study sample, the sample suitability index of Kaiser–Meyer–Olkin (KMO) and the Bartlett's test of sphericity ($p < 0.05$) were utilized. A KMO value greater than 0.8 reveals the sample is well suited and $p < 0.05$ in the Bartlett's test of sphericity indicates the variables are significantly correlated. To extract the factors, the main components method was utilized (factor loads with values over 0.50 are satisfactory), followed by a varimax rotation; moreover, to measure the minimum number of factors to retain, the Kaiser criterion (eigenvalues greater than 1) was utilized.

The reliabilities of the 11 Christmas symbols and of the obtained factors were evaluated with Cronbach's alpha: values between 0.8 and 0.9 present good internal consistency, and over 0.9 present very good internal consistency (Marôco & Garcia-Marques, 2006).

To analyse if there is a correlation between variables, the Pearson or Spearman correlation were used. According to Marôco (2018), for human and social sciences, the magnitude of the correlations is: (i) weak when $|r| < 0.25$; (ii) moderate when $0.25 \leq |r| < 0.5$; (iii) strong when $0.5 \leq |r| < 0.75$ and (iv) very strong when $|r| \geq 0.75$.

For the analysis of the differences of the Christmas symbology importance between independent groups, depending on whether the established comparison was between two or three groups, the Student's t-test or Welch's t-test were applied as an alternative to ANOVA (Analysis of Variance). Every time significative differences were found through Welch's t-test, the Games-Howell multiple comparison test was utilized (Field, 2018; Pallant, 2016). It is emphasised that the statistical assumptions for the different tests' application were previously analysed, which allowed its application with confidence.

7.4 Results and Discussion

7.4.1 Exploratory Factor Analysis

Table 7.1 shows the results of the application of the exploratory factor analysis (EFA) technique to the 11 Christmas symbols. All symbols presented values in the commonalities greater than 0.5 (values vary between 0.59 and 0.89). The Bartlett's test of sphericity and the KMO index for the 11 items which regard the Christmas symbology importance ($\chi^2(55) = 9382.713$, $p < 0.001$, KMO = 0.864) presented good suitability of the sample to apply the EFA (Pestana & Gageiro, 2014). According to Kaiser's criterion, three factors which, combined, explain 77.48% of the total variance were retained.

Table 7.1 Matrix of the factor loads and commonalities of Christmas symbology

	Factors			h^2
	1	*2*	*3*	
S2. Santa Claus	0.69			0.59
S4. Santa Claus, sleigh and reindeer	0.65			0.58
S5. Christmas tree	0.89			0.82
S6. Christmas lights	0.90			0.85
S7. Christmas decorations (balls, bells…)	0.90			0.85
S8. Christmas star	0.76			0.71
S9. Christmas carols	0.65			0.60
S10. Mistletoe		0.89		0.90
S11. Pine cones		0.90		0.89
S1. Nativity of Baby Jesus			0.92	0.88
S3. Nativity scene			0.86	0.86
Eigenvalues	4.51	2.06	1.96	
% Explained Variance (77.48%)	41.01	18.69	17.78	
Cronbach's alpha (0.91)	0.92	0.89	0.87	

Source Elaborated by the authors

The first factor explains 41.01% of the variance, and through the observation of the symbols which compose it, it may be designated as Christmas Time Decorations. These Christmas season decorations were referred in the literature review, namely by Barth (2000), Batinga et al. (2017), Cruz (2013), Faria (2013), Hall (2014), Meyer (1977), Pettersson et al. (2020) and Rakow (2019). These authors, in their texts, mention the Christmas symbols' importance, particularly Santa Claus, the Christmas tree, Christmas carols and Christmas lights.

The second factor explains 18.69% of the variance and regards symbols which represent Christmas garland (decorations welcoming the visitors). This factor, by its characteristics, will be designated as Prosperity and Abundance. These symbols which represent Christmas garland are referenced by Cleeve (1958) and Ollerton et al. (2016).

The third factor explains 17.78% of the variance and is formed by symbols which are referent to the nativity of Jesus and the nativity scene which portraits the scene of the nativity of Christ, that is, a manger, Mary and Joseph, the animals, the shepherds and the three biblical Magi, who welcome Baby Jesus inside a wooden hut in Bethlehem. This factor will be designated as Nativity and History of Jesus. This scenery is described in the literature review by the authors Batinga et al. (2017), Cruz (2013), Demetresco (2010), Rocha (2012) and Roque (2013).

The Cronbach's alpha value of the 11 Christmas symbols is 0.91, thus internal consistency is very good. The three factors which result from the EFA present Cronbach's alpha values greater than 0.86 (Table 7.1), from which one can consider internal consistency as good. Thereupon, the 11 proposed symbols are reliable to evaluate the importance of the symbology associated with Christmas.

Note that from the application of the EFA there were formed two factors (factors 2 and 3) with only two items each. According to Hair et al. (2014), one must have at least 3 items to determine a factor formation; however, the factor loads are high (0.86 and 0.92), thus they are very well represented in the factor solution. Besides the symbol "nativity scene" symbols like, for instance, the main characters of the nativity scene should have been analysed, besides beyond the pine cones, such as the pine tree's branches and the red flower associated with Christmas (*Euphorbia Pulcherrima*).

7.4.2 Consumption and Importance of the Symbology in Christmas Season

The 1086 respondents to the questionnaire are planning to spend, on average, 420 euros (SD = 409.87) in the Christmas season, while it is estimated that, on average, 250 euros (SD = 261.25) are spent in gifts to offer and 170 euros (SD = 199.41) are spent in consumption goods. The values obtained in this study are greater than the ones which were determined in a Christmas study on 786 Portuguese people by Deloitte, the consulting firm (Deloitte, 2019). In the referred investigation, it was concluded that each Portuguese family estimated to spend, on average, 387 euros (9 more euros than it was concluded in a Christmas study by the same corporation, regarding 2018), and that value is below the European average, since this is 461 euros.

In general (Table 7.2), individuals attribute bigger levels of importance to the factor Nativity and History of Jesus (M = 3.71, SD = 1.24) and lower levels of importance to the factor Prosperity and Abundance (M = 2.78, SD = 1.21). In particular (Table 7.2), it is observed that the Christmas tree (M = 4.01, SD = 1.11), Christmas lights (M = 3.88, SD = 1.16) and the nativity of Jesus (M = 3.78, SD = 1.35) are the symbols to which respondents give the greatest levels of importance, while mistletoe (M = 2.83, SD = 1.27) and pine cones (M = 2.74, SD = 1.27) are the symbols to which respondents give the lowest levels of importance.

All Pearson's correlations which are presented in Table 7.2 are positive, which means that increasing the levels of importance given by respondents to Christmas symbols, the estimated value of consumption in the Christmas season also rises. However, it is observed that all correlations are below 0.13, thus are classified as weak correlations. The statistically significative correlations are duly marked in Table 7.2. The factor Nativity and History of Jesus is the one that contributes to consumerism the most because it presents the highest correlation coefficient.

The existence of a relationship between the three factors of Christmas symbology was also studied, and it was verified that all correlations were statistically significative and positive: the correlation between Christmas Season Decorations and Prosperity and Abundance is considered as strong ($r = 0.53$, $p < 0.01$), the correlation between Christmas Season Decorations and Nativity and History of Jesus ($r = 0.39$, $p < 0.01$) and the correlation between Prosperity and Abundance and Nativity and History of Jesus ($r = 0.39$, $p < 0.01$) are considered as moderate. The

Table 7.2 Descriptive measurements and correlations

	M	SD	*Correlations*		
			Consumption of goods	*Consumption of gifts*	*Total consumption*
Factor 1: Christmas season decorations	3.57	1.00	0.09**	0.05	0.08**
S2. Santa Claus	3.16	1.31	0.10**	0.06*	0.10**
S4. Santa Claus, sleigh and reindeer	2.90	1.28	0.05	0.04	0.05
S5. Christmas tree	4.01	1.11	0.10**	0.06	0.09**
S6. Christmas lights	3.88	1.16	0.05	0.03	0.05
S7. Christmas decorations (balls, bells…)	3.77	1.17	0.08**	0.02	0.06*
S8. Christmas star	3.72	1.22	0.07*	0.03	0.06*
S9. Christmas carols	3.57	1.22	0.07*	0.04	0.06*
Factor 2: Prosperity and Abundance	2.78	1.21	0.07*	0.10**	0.10**
S10. Mistletoe	2.83	1.27	0.07*	0.09**	0.09**
S11. Pine cones	2.74	1.27	0.07*	0.10**	0.10**
Factor 3: Nativity and History of Jesus	3.71	1.24	0.10**	0.09*	0.11**
S1. Nativity of Baby Jesus	3.78	1.35	0.11**	0.11**	0.12**
S3. Nativity scene	3.64	1.31	0.08**	0.07*	0.09**

** $p < 0.01$, * $p < 0.05$
Source Elaborated by the authors

moderate correlation between Christmas Season Decorations and Nativity and History of Jesus is justifiable because, for example, the Christmas star in the biblical story guided the three biblical Magi towards the location of the nativity of Jesus, but is also used as a Christmas decoration, as it is placed at the top of the Christmas tree by many families. These contents are referred in the literature review by Barth (2000) and Meyer (1977).

7.4.3 Descriptive Analysis of the Christmas Symbology Importance

Table 7.3 presents the results of the Student's t-test to compare the Christmas symbology importance between males and females and between the ones who have and do not have a direct family member whose age is less than 16 years. Statistically significative differences between males and females ($p < 0.01$) were verified in all factors, being that females attribute greater levels of importance to Christmas symbology. As a result, it is observed that females live Christmas more intensely than males.

Table 7.3 Comparison of the Christmas symbology importance in the variables: Gender and having a direct family member with an age under 16

	Gender					
	Male (n = 477)		*Female (n = 609)*		*t-test*	
	M	SD	M	SD	t	p
Christmas Season Decorations	3.38	1.04	3.72	0.95	−5.58	0.000**
Prosperity and Abundance	2.63	1.18	2.90	1.21	−3.79	0.000**
Nativity and History of Jesus	3.59	1.26	3.80	1.23	−2.76	0.006**
	Have a Direct Family Member with an Age Under 16					
	No (n = 657)		Yes (n = 429)		t-test	
	M	SD	M	SD	t	p
Christmas Season Decorations	3.50	1.02	3.68	0.96	−2.90	0.004**
Prosperity and Abundance	2.77	1.21	2.79	1.20	−0.22	0.828
Nativity and History of Jesus	3.67	1.26	3.78	1.22	−1.45	0.146

** $p < 0.01$
Source Elaborated by the authors

As far as Christmas symbology importance among those who have and do not have a direct family member whose age is less than 16 years is concerned, it was only possible to find statistically significative differences on the factor Christmas Season Decorations ($p < 0.01$); the group of individuals who have a direct family member whose age is less than 16 years present higher levels of importance regarding Christmas season decorations. As Cruz (2013), Faria (2013) and Batinga et al. (2017) refer, Christmas is the children's feast. It is the feast in which gifts are given to children, distinguishing presents from other important dates in the year, and it is therefore natural that families with children and adolescents value the Christmas season importance.

Through Table 7.4 it is possible to observe the correlations (Pearson or Spearman) between the Christmas symbology importance and the variables: age, education level and monthly income of the household. A statistically significative and negative correlation between the factor Christmas season Decorations and age is verified ($r = -0.16$, $p < 0.05$), as well as it is observable a statistically significative and positive correlation between the factor Nativity and History of Jesus and age ($r = 0.18$, $p < 0.01$). Consequently, it is possible to affirm that older individuals give less importance to symbols related to Christmas decorations (Santa Claus, Santa Claus, sleigh and reindeer, Christmas tree, Christmas lights, Christmas star and Christmas carols) and more importance to the nativity of Jesus and to the nativity scene, which is in accordance with Batinga et al. (2017).

Table 7.4 Correlation between Christmas symbology importance and the variables: age, education level and monthly income of the household

	Age	*Education level*	*Monthly income of the household*
Christmas Season Decorations	-0.16^{*}	0.00	0.02
Prosperity and Abundance	-0.03	0.01	-0.02
Nativity and History of Jesus	0.18^{**}	0.05	0.04

$^{**}p < 0.01$, $^{*}p < 0.05$

Source Elaborated by the authors

It was not possible to find statistically significative differences between Christmas symbology and the variables: education level and monthly income of the household ($p > 0.05$). Hence, it is understandable that it is a tradition which is transversal to Portuguese society.

To compare the Christmas symbology importance in the variables, marital status and religion, Welch's t-test was applied (Table 7.5) and to ascertain in which groups significative differences are verified, the Games-Howell multiple comparison test was utilized. Therefore, one can affirm that there are statistically significative differences in the factors Christmas Season Decorations ($p < 0.01$) and Nativity and History of Jesus ($p < 0.01$) between the different marital statuses. Regarding the factor Christmas Season Decorations, significative differences between individuals who are single and who are separated, divorced or widowed ($p < 0.01$), and between married or living in a common-law marriage and separated, divorced or widowed ($p < 0.05$) were found. Single individuals are the ones who give higher levels of importance to Christmas season decorations. As far as the factor Nativity and History of Jesus is concerned, significative differences between single individuals and married or in common-law marriage individuals are found ($p < 0.01$), as married or in common-law marriage individuals give higher levels of importance to the nativity and history of Jesus.

There are statistically significative differences in every factor between the three groups: Christianism, Atheism, and other religions ($p < 0.01$). In all factors, significative differences between Christianism and Atheism are encountered ($p < 0.01$), as well as in Christianism and other religions ($p < 0.05$), and the Christian people are the ones who give higher levels of importance to Christmas symbology. This situation is defensible because it was already expected that different religions give different levels of importance to Christmas symbology.

7.5 Conclusion

Christmas is an inescapable celebration of the Christian world, and the nativity of Christ divided the history of the world and of humanity into before and after. As it is referred by Cruz (2013), the typicality of Christmas tends to disappear, becoming a season of consumption in an increasingly materialistic society. The objective of this chapter was to study the importance of Christmas symbology and consumerism in Christmas time, having as a premise that the greater the importance given

Table 7.5 Comparison of Christmas symbology importance in the variables: Marital status and religion

	Marital status							
	Single (n = 498)		*Married/in a common-law marriage (n = 491)*		*Separated/divorced/widowed (n = 97)*		*Welch's t-test*	
	M	SD	M	SD	M	SD	F	p
Christmas Season Decorations	3.63	1.03	3.57	0.96	3.27	0.99	5.30	0.006**
Prosperity and Abundance	2.81	1.23	2.74	1.19	2.83	1.18	0.54	0.585
Nativity and History of Jesus	3.54	1.30	3.88	1.19	3.73	1.15	9.22	0.000**
	Religion							
	Christianism (n = 946)		Atheism (n = 104)		Other religions (n = 36)		Welch's t-test	
	M	SD	M	SD	M	SD	F	p
Christmas Season Decorations	3.65	0.93	3.07	1.29	3.01	1.15	14.72	0.000**
Prosperity and Abundance	2.86	1.19	2.25	1.21	2.31	1.21	14.89	0.000**
Nativity and History of Jesus	3.95	1.06	1.99	1.14	2.50	1.38	153.95	0.000**

** $p < 0.01$

Source Elaborated by the authors

to Christmas symbols, the greater the estimated consumption value in the Christmas season.

The utilised instrument showed to be adequate to measure the Christmas symbology importance for Portuguese population, with an internal consistency considered as good and presenting a structure with three factors, designated as Christmas Season Decorations, Prosperity and Abundance and Nativity and History of Jesus.

Out of the eleven symbols which were studied, the symbols to which individuals gave greater levels of importance were the Christmas tree, Christmas lights and the nativity of Jesus. The factor Nativity and History of Jesus was considered by the respondents as the one which presented the biggest levels of importance, while the factor Prosperity and Abundance presented the lowest levels of importance.

According to the obtained results, it is verifiable that the 1086 people who responded to the questionnaire estimate to spend, on average, approximately 420 euros in the Christmas season, about it is estimated that 250 euros are spent in gifts to offer and about 170 euros are spent in consumption goods. Furthermore, these values are below the European average of 461 euros.

All correlations between the different symbols and estimated consumption in the Christmas season are positive, which means that the greater the importance given to Christmas symbols, the greater the estimated value of consumption in the Christmas time, although the magnitudes of the correlations are weak. The factor Nativity and History of Jesus is the one which contributed the most to consumerism.

It is possible to affirm that, in every factor which analyses Christmas symbology importance, females are the ones who give greater levels of importance to Christmas symbology. The group of individuals who have a direct family member whose age is under 16 years presented the greatest levels of importance to Christmas season decorations. It is verifiable that older individuals give lower levels of importance to symbols related to Christmas decorations and higher levels of importance to the nativity of Jesus and the nativity scene. Single individuals give the highest levels of importance to Christmas season decorations and married or in a common-law marriage individuals attribute the highest levels of importance to the nativity and history of Jesus. As far as religion is concerned, Christian individuals are the ones who give the highest levels of importance to Christmas symbology.

This study may help academics, researchers and professionals to better understand the Christmas symbology importance to the Portuguese population and its relationship with consumerism. Regarding marketing, knowing the importance of Christmas symbology becomes a priority. This knowledge helps the different brands and companies to define advertising strategies which encourage consumption at the Christmas season. In view of today's existing competitiveness, brands and companies must resort to the good use of digital marketing tools, for example, sending emails with brand-specific marketing indicating possible discounts, promotions, gifts and payment facilities. This is because consumers at Christmas time are more willing to interact with brands and companies, as they try to research what gifts to buy to offer to different family and friends.

In a future investigation, it is intended to perform a study that compares Christmas symbology importance for children and adults. It is also proposed to add a few items to assess the importance of Christmas symbology, and therefore, to validate a scale of Christmas symbology importance. Thus, for instance, it is proposed to introduce the symbols which correspond to the main figures that constitute the nativity scene and the symbols pine branches and red flower associated with Christmas (Euphorbia Pulcherrima).

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CHAPTER 8

COVID-19: Future Marketing and Technology Research Challenges

Vanessa Ratten and Seyed Khaksar

8.1 Introduction

The year 2020 has been a surprising year with the COVID-19 pandemic affecting the global economy in a quick and unforeseen way. Whilst other health pandemics have affected the society, COVID-19 has seen concurrent impacts in the way people live and work in society. COVID-19 has had a massive effect on the world's economy since it first originated in December 2019. The World Health Organization declared COVID-19 a pandemic on March 11, 2020 due to its rapid impact on global society. This meant governments around the world faced a health and societal emergency. COVID-19 is a social and economic crisis that has affected society in a way not seen before. Social crises such as hunger, poverty and migration tend to be related to economic growth whilst economic

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crises tend to stress financial issues (Buchanan & Denyer, 2013). COVID-19 is a health crisis that is spread through close interaction with other humans. As a result, governments have tried to decrease human interaction in order to minimise the spread of the virus (Eggers, 2020). This has meant keeping individuals in isolation in order to minimise social interaction. This strategy minimises the spread of infections but also economic and marketing effects.

Marketing innovations are essential in times of crises. However, less is known about how marketing and technological innovation combine in a crisis context, including initiatives seeking to assist business. The nature, characteristics and outcomes of marketing innovation initiatives are still under researched particularly in a COVID-19 context. Although marketing innovations are associated with positive initiatives there can still be some difficulties in adjusting to the new marketing environment (Ratten, Marques, et al., 2018). This creates a need for regional development and government policy to focus on marketing in terms of providing relief to businesses feeling it difficult to connect with consumers. Targeted research of COVID-19 marketing issues is needed because of insufficient knowledge of these matters (Sharma et al., 2020). Marketing has idiosyncratic traits in times of hardship that enables businesses to be more competitive (Ratten, Duarte, et al., 2018). However, this traits require new research, practice and policy approaches in terms of COVID-19 advances in society.

There are difficulties associated with COVID-19 marketing research due to less frequently prioritised issues. Whilst the COVID-19 context has been singled out as requiring further investigation there is still some way to go before fully understanding the impact COVID-19 has had on marketing innovation (Wen et al., 2020). This chapter has two aims: first, to analyse whether and how COVID-19 has impacted marketing and technology practices; second by examining the significance of marketing/technology motivated change due to COVID-19.

In this chapter, I will discuss the emergence of COVID-19 research. This discussion will show that the research is new and still in a nascent stage. Therefore, concepts, ideas and theories are still being developed. The current research is complemented with existing research but there is still much way to go before COVID-19 is fully integrated into marketing and technology practices. Although substantial insights have been gained through the current research, there is still much unfinished research. Thus, the following research issues need to be discussed in more detail.

- The role of context in COVID-19 research including the impact of country and regional environment in terms of marketing communications.
- The mechanisms required to respond to COVID-19 change based on marketing and technology predictions.
- A systematic comparison of country policies regarding COVID-19 marketing approaches.

This chapter is structured as follows. The next section will discuss in more detail crisis management and organisational resilience. This then leads to a discussion on future research suggestions and practitioner perspectives. Lastly the chapter focuses on examining policy implications for marketers derived from the COVID-19 crisis.

8.2 Crisis Management

Throughout history, crises have had an impact on the prevailing business conditions (Adger, 2000). Nowadays the COVID-19 crisis has focused attention on how digital technology has changed business structures. In the past brick and mortar businesses were the norm but this has changed to more digital forms of business. The advantage of the new business structure is that transactions occur in an online form that can be processed in any geographic location. This saves time and money that was previously spent on retail stores. Moreover, due to increased international efficiencies in the supply chain it means products can be sourced in a just in time format. This enables businesses to source products on demand and lowers their inventory costs.

Being resilient is important for organisations who want to reduce the impact of COVID-19. For this reason, business continuity management is a high priority for organisations. Gomez et al. (2020, 404) defines organisational resilience as "the set of processes focused on reducing organizational impact and protect the key stakeholders (eg communities and employees) of an eventuality". Organisations can be resilient by focusing on key strategies that enable them to adjust to change (Faulkner, 2001). This means mitigating risk by deriving coping strategies. This enables an organisation to be better prepared for potential environmental change. It can be hard to do this due to uncertainty in the market environment. Therefore, it can help to strategies about potential eventualities. This means taking advantage of existing resources by thinking about new ways they can be used. This enables an organisation to be more agile and flexible in adapting to new market conditions (Hills, 1998).

The sudden impact of COVID-19 on the global economy has caused much anxiety and fear (He & Harris, 2020). Whilst stress has become a common issue in workplaces the COVID-19 pandemic has accelerated stress issues. Stress during the COVID-19 pandemic includes psychological harm due to its unknown length (Kraus et al., 2020). In addition, with more people working from home this has caused a sense of loneliness for many individuals. As a result of these psychological changes, COVID-19 can be considered as a societal challenge. Wagstaff et al. (2020, 380) states “many of the society’s greatest challenges are defined as wicked problems”. COVID-19 is a wicked problem due to the substantial impact it has had on society. Moreover, as the COVID-19 pandemic is still ongoing there is a need to find solutions to problems (Jeyanathan et al., 2020). To do this requires a collaborative approach with citizens, businesses and government working together. This means using unique tools to analyse COVID-19 effects from a crisis management perspective. Nascent or new marketing campaigns have been particularly affected by COVID-19 due to resource issues. This means that whilst COVID-19 has brought benefits to numerous sectors of the economy it has also disrupted marketing practices. As a result, early movers to online marketing services have benefitted from the COVID-19 situation. However, due to the ongoing nature of the COVID-19 crisis, more research is required on how it has affected marketing and technology practices. This will be discussed in more depth in the next section.

8.3 Future Research

The arrival of COVID-19 means there are many new lines of research to consider (Kirk & Rifkin, 2020). This section will discuss future research on COVID-19 by focusing on approaches that can be used to study COVID-19 and whether a separate theory of COVID-19 is needed. To capture the impact COVID-19 has had on society, a vibrant pipeline of new research is required (Brown & Rocha, 2020). Previous research on marketing and technology needs to be used as a way to advance new COVID-19 research. In this way, existing theories can be supplemented or updated to take into account COVID-19 effects (Brinks & Ibert, 2020). To do this research needs to explore the relationship between COVID-19, technology and marketing. This will underscore the importance of COVID-19 related marketing and technology change.

8.3.1 Context

Conceptual contributions to advancing COVID-19 research include studying marketing innovation in different contexts. Currently certain COVID-19 marketing topics are overrepresented in the literature particularly those from a developed country context. This means there is a gap in the literature on how COVID-19 has affected distinct socio-demographic groups (Liguori & Winkler, 2020). Marketing researchers need to view different market segments as having distinct traits that merit further research. This means whilst earlier research has shown international marketing effects of COVID-19 more in-depth country specific studies are required (Kuckertz et al., 2020).

Although contextual factors in marketing have been studied before, more work is required on how policy and regulatory factors shape the progress of marketing efforts. This means research should examine the institutional factors that support COVID-19 marketing efforts. It would be valuable in investigating the helpful or hindering role of marketing in times of crisis. This can help improve existing and future marketing practices. At the moment there is little knowledge about how local, regional and country-level policies influence marketing decisions. Research needs to examine to what extent marketing policies are effective as well as what kind of marketing strategies have worked during the COVID-19 crisis. This would be especially meaningful in the current context that favours local policy initiatives.

Researchers and teachers in the field of marketing would greatly benefit from rethinking how they analyse COVID-19. New research is required on useful typologies and taxonomies to explain COVID-19 and marketing change. Due to the time delay between the COVID-19 pandemic occurring and academic articles being published there is expected to be a substantial increase in research on this topic in future years. Early research has tended to focus on the immediate issues that have gained attention in the media. These issues include the shift towards digitalisation, working from home and the effects of social distancing. Further issues worthy of more attention include to what extent marketing efforts have had to change because of increased digitalisation capabilities by consumers. As consumers become more savvy about digital marketing campaigns it would be interesting to analyse in more detail how innovation drives marketing performance. This means focusing on issues around augmented and virtual reality in times of the COVID-19 crisis.

Marketing is a way businesses communicate information to consumers and will likely be forever changed due to COVID-19. Marcovid-keting communications enable information to be shared and influences consumer's attitudes towards certain products and services. COVID-19 has changed marketing practices due to constant innovation and digital transformation. On the technology side the internet has facilitated substantial growth in electronic commerce services. This has been needed during the COVID-19 pandemic due to social distancing requirements necessitating online purchases. Moreover, for businesses without digital platforms COVID-19 meant they had to add digital marketing and payment methods. This radically altered the digital marketing environment and has resulted in a surge of digital-based businesses. Businesses also have become more knowledgeable about new features and services that can help them communicate better with stakeholders. Customers, suppliers and government entities are all considered stakeholders so in the digital-based COVID-19 trading environment it is important that all these stakeholders work together. On the user/consumer side people are finding new ways to utilise digital capabilities because of COVID-19 restrictions. With consumers spending more time at home there has been the occurrence of more co-creation marketing activities.

8.3.2 Research Approaches

Due to the ongoing nature of COVID-19 there needs to be standardised data collection methods that can enable the comparison of data (Alon et al., 2020). This would help to differentiate results based on socio-demographic concerns. To do this more information is required on both the individual and firm level. Moreover, research could take a multi-level analysis perspective to analyse how different individuals and entities handle crises. A mixed methods approach is recommended that incorporates both qualitative and quantitative approaches. This would enable different perspectives and methodologies to be used that could help triangulate the results. Advantageously, a mixed method approach provides a more holistic way to analyse COVID-19. This means acknowledging that COVID-19 research is in constant evolution as it is a socially constructed phenomenon (Bailey & Breslin, 2020).

In the context of COVID-19 research, both the societal and scholarly dimensions of technology are crucial. The use of mixed methods is conducive to understand both of these dimensions. It would be fruitful to draw upon newer methods of doing research that analyse data in different ways. This would contribute both in a methodological and practical way to the body of knowledge on COVID-19.

Taking a COVID-19 narrative to research through ethnographic approaches might yield novel results. This would encourage the connection between research and practice to be more evident. Traditionally technology research has been dominated by quantitative methodologies but this is changing with more qualitative research emerging based on content and discourse analysis. Technology is constantly changing making the process of new product development faster. This creates opportunities for firms to cement their market position by developing new technological competences (Ratten, 2019). Exploring innovative ways of doing research on COVID-19 can make a unique contribution to scholarship and help in understanding COVID-19.

Although existing studies are allowing us to compare different COVID-19 contexts, most studies remain cross-sectional (Parnell et al., 2020). This means that whilst findings can be replicated in other contexts, there is still a time lag between research and practice. As the COVID-19 pandemic is still ongoing more longitudinal studies are needed to understand in depth its effect on marketing practice (Marshall & Wolanskyi-Spinner, 2020). This will enable causality to be studied in terms of different marketing and technological factors.

From a methodological viewpoint, future research needs to focus on causality and measurement. Causality implies that the COVID-19 pandemic will cause alterations in marketing and technology. This means that whilst the COVID-19 pandemic is the cause of change, there can also be causality derived from resulting change (Krishnamurthy, 2020). This means causality occurs in both directions and can have a positive or negative effect. Thus, there is an interactive and reflexive process caused by the COVID-19 pandemic. Therefore, results from COVID-19 studies need to be analysed very carefully.

Measurement issues should be carefully considered when conducting research on COVID-19, technology and marketing phenomenon. This is due to there being measurement problems in analysing COVID-19 effects (Higgins-Desbiolles, 2020). There is no consensus about how best to measure COVID-19 effects. Thus, it rather depends on the personal preferences of the researcher. Due to the difficulty in comparing covid-19 results due to measurement issues the comparison of findings might be limited (Cortez & Johnston, 2020).

There is a lot of data about COVID-19 that remains largely unexploited (Brammer & Clark, 2020). Meta-analyses of case studies about COVID-19 can increase comparability between cases. Thus, there is still much research potential still yet to be explored. Due to the large amount of data collected on COVID-19 it might take some time before there is research saturation. Thus, in the meantime there are ample research opportunities to explore in more depth the relationship between COVID-19, marketing and technology. There is potential in also using qualitative data collection and analysis to capture the dynamic process of COVID-19 (Akkermans et al., 2020). Challenges related to data about COVID-19 include the following issues: How much data should be used in research studies on COVID-19? And how many time periods should be considered?

One of the reasons for the paucity of information regarding COVID-19 is the methodological difficulties in obtaining data. Most individuals and businesses have been affected in some way by COVID-19 but obtaining timely information about these consequences can be hard. This means it can be useful to obtain data at different time points during the crisis to understand immediate effects (Ansell & Boin, 2019). The lockdowns imposed by many governments have economic and societal effects. This means continued processes of lockdown have severe consequences for society unless they are managed in the right way (Donthu & Gustafsson, 2020).

8.3.3 Integrative Opportunities

Research on COVID-19 has tended to exist in silos, which may be a result of its recent and ongoing effect. Research often happens in silos without consideration of interdisciplinary perspectives. This is changing particularly with regard to COVID-19 research due to concurrent social, health and economic effects. Both an internal and external perspective is required on COVID-19 in order to enable the research to be more holistic in nature. Marketers need to understand the immediate impact of COVID-19 then what do they recommend for the way forward. Transparency in marketing support mechanisms is required. This will include ongoing communication about COVID-19 effects. There is a need for long term strategy and planning with regards to COVID-19 change. This is due to the potential of other crises occurring in the global business environment. Thus, due diligence from a long term perspective is required. It is important to acknowledge the importance of new marketing initiatives.

We have only just begun to scratch the surface in analysing the effect of COVID-19 on society. This means more research is required across multiple disciplines on COVID-19. This will encourage further consideration of practical and theoretical contributions to the technology and marketing fields. Research can build on elements of entrepreneurial learning in order to consider the innovative knowledge derived from a crisis situation. This would advance the COVID-19 scholarship by analysing businesses that have averted financial disaster by taking radical steps. This would include comparing business activity prior and during the COVID-19 pandemic to determine any significant differences. This would shed light on the relational characteristics of the COVID-19 pandemic, whilst being sensitive to cultural attitudes. It is not yet clear how culture has affected COVID-19 business practice. Anecdotally there is much evidence to suggest that culture in the form of adherence to regulations has influenced COVID-19 infection rates. This means compliance plays a key role in overall business performance.

There is a need to focus on less examined but critical issues associated with COVID-19. Surprising is that the effect of COVID-19 on marketing still remains unclear. Whilst in practice the effect is clear researching the link requires more effort. Specifically, the role of marketers preparedness and thinking regarding COVID-19 has not been adequately researched. A process oriented view from the initial reaction by marketers to COVID-19 to the more long term change is required. This can include cognitive adaptability by marketers. Another interesting research avenue is to analyse whether the COVID-19 pandemic has meant marketers succumb to the same cognitive biases that are used prior to a crisis. This means investigating further how the unstable market environment has affected decisions about marketing. Scholarly attention is required to understand how marketers evaluate opportunities from COVID-19. This means understanding the decision making style then focusing on actions towards marketing. This would enable more information to be obtained about the intersection of psychological, economic and sociological factors in marketing activities.

8.4 Practitioner Perspective

Businesses that found it difficult to access financial resources before COVID-19 have found it even harder in the new environmental conditions. There is an increase in necessity entrepreneurship due to crises situations. There is a drop in perceived opportunities and entrepreneurial intentions due to the uncertain market environment. Despite what academics and practitioners have learnt about marketing over the last decade, due to the arrival of COVID-19 the future of marketing might not be merely a continuation of what we already know. This means a pertinent question is due to the fast-paced and ever-changing nature of COVID-19 on the business environment, what is the future of marketing? Answering this question is the goal of this chapter as it is important to consider how COVID-19 has changed the future of marketing. COVID-19 is culturally significant as it has altered consumer's behaviour and way they respond to marketing messages. Marketing is always changing and the way communications are disseminated is totally different to even a year ago. There are some strengths and limitations of approaches to addressing problems caused by COVID-19. To be useful to researchers and practitioners, new research should ideally meet several criteria:

1. Accuracy—The research needs to represent an accurate account of COVID-19 affects. This means documenting the nature of the effects and considering the timing of information. There tends to be a trade-off in research in terms of obtaining all necessary sources of information and publishing findings. Due to the complex nature of COVID-19 these considerations need to be evaluated in light of the societal impact of reporting the information. This means research needs to clarify in depth the limitations of the findings but on the flip side discuss ramification for current studies. By being precise about what the research is hoping to fulfill will make it easier for the findings to be disseminated in a clear manner. Results of research studies need to be interpreted based on what information was available at the time. This means the geospecificity and socio-demographic nature of the COVID-19 data needs to be taken into account.
2. Generalizability—The research on COVID-19 is normally collected based on one context or one time period. Longitudinal research does exist but is much rarer. This means care is needed about generalising results to a larger population. Although research of any

kind tends to have positive benefits, due to the complex nature of COVID-19 there needs to be some degree of trepidation with research results. This will enable more thought and contemplation to result that will provide a better interpretation of the data.

3. Antecedents—The previous position or situation prior to COVID-19 needs to be acknowledged by researchers. This will provide a way to explore pre, during and post COVID-19 effects. Antecedents in terms of economic, financial and social positions of a business need to be considered. This will provide a way for the causal dynamics to be clearly elucidated.

8.5 Policy Implications

Policymakers need to provide clear communication about COVID-19. This includes promoting resilience with a responsible manner. Due to a growing sense of nationalism with many country borders closed more research is needed on innovative policy initiatives. To do this, marketers need to encourage a community of practice to facilitate guidance. In order to accelerate the shift to digitalisation marketers need to innovate and this requires help from policymakers. These shifts are good as it changes the way marketers are perceived by policy planners. Findings from research on COVID-19 policy can enable the formation of better policies.

This book contains some useful insights for policymakers as well. Each chapter presents information about COVID-19 from a technology or marketing perspective, which is useful for policy makers to understand market developments. The findings suggest that the COVID-19 market realities experienced by consumers should be the locus of policy development initiatives. The reality is that the global marketplace has substantially changed due to the disruptions caused by COVID-19. This means existing policies need to quickly change to focus on emerging COVID-19 related issues.

Businesses, government policymakers and others require advanced early warning of impeding crisis so they can mobilise resources to respond in the best way (Masten & Powell, 2003). Due to increased information technology and data analytics capabilities there are crisis forecasting systems that help predict events (Ratten & Miragaia, 2020). However, some crises will not be able to be predicted due to their unknown origin (Walker et al., 2020).

The COVID-19 pandemic has been particularly damaging on the world economy with more than 30 million confirmed cases and one million deaths. This has caused a lot of pain around the world. The Americas have been the most affected with the United States being significantly affected. COVID-19 has created havoc in the economy and the COVID-19 recession is expected to be worse than the Great Depression. There is expected to be negative real GDP growth. COVID-19 has caused a global economic slowdown. Trade, investment and employment have all been affected. There is a staggering level of uncertainty. Many businesses have closed particularly in the services sector. Digital-based businesses have flourished due to the need for consumers to buy online.

Urgent priorities for business to recover from the COVID-19 pandemic include learning digital business skills. This will help businesses to build back better from the COVID-19 pandemic. This means developing internationally and digitally oriented businesses that can be resilient and adapt to change (Liu et al., 2017). Businesses do not operate in a void but in an ecosystem environment. This means they need to collaborate and cooperate with other entities.

The aviation, tourism and hospitality industries are among the hardest hit by the COVID-19 pandemic. In addition, the informal economy has been affected due to the need for social distancing and lack of physical interaction. The food, pharmaceutical and technology industries have benefitted from the COVID-19 pandemic. This is due to increased interest in online products and services. The mass move to online and remote working has led to an increase in logistics. There has been a reduced productivity level in many sectors. The immediate measures taken by policy makers has included direct interventions such as tax relief and stimulus packages.

8.6 Conclusion

In the future, COVID-19 appears likely to influence marketing through adaptations of business models and sales processes to suit a digital and dynamic environment. These impeding transformations will make it possible for businesses to bounce back from the crisis and to reconfigure their existing marketing strategies. The COVID-19 crisis has triggered a change in marketing behaviour, which will ultimately lead to more digital components. Yet numerous marketing businesses suffer from an inability to change. This is because of a need to keep the status quo and resist change. Marketing will not be the same after the COVID-19 crisis has subsided and is likely to include more digital components. Marketers need to respond to the crisis through collaboration action. This will enable better recovery outlooks for marketing purposes. This will enable better recover outlooks. As a consequence of the crisis, marketers will have to re-examine their practices and concentrate more on innovative campaigns. This may entail both digital and augmented reality components that provide a more interactive marketing format.

In sum, this chapter represents a unique integration of available studies on COVID-19 and projected future research paths. By analysing existing COVID-19 studies, it enabled a representative discussion to emerge that gives clues to future developments. Implications for policy makers and marketers were stated. It is my hope that this chapter and other research will be instrumental in fuelling the pipeline of COVID-19 marketing and technology research.

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