

Chapter 1

Proposing the eTourism Adoption Model (eTAM) in the Context of Bangladesh



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Abstract eTourism is a phenomenon that has been closely linked to the growth of Information and Communications Technology (ICT) and to understand the areas of tourism more than 30 years ago. The purpose of this study is to assess and examine theoretical framework of technology acceptance models to develop the eTourism Adoption Model (eTAM) in the context of Bangladesh. Mixed method research was applied for exploring the challenges and motivational factors for eTourism adoption. In order to propose the eTAM, this study investigated previous studies, theories of technology adoption and tourists' expectations as the bases of literature review section to develop eTAM. The research then conducted in-depth interviews of the target respondents using a semi-structured questionnaire. Based on the literature review and in-depth interview outcomes, this study identified the factors of electronic Tourism Adoption Model (eTAM). eTAM provides a basic structure of tourists' adoption of technologies to meet their demands and satisfaction. As believed, eTAM can support the concerned tourism agencies for policy making, demand and supply assessing, and guidelines for sustainable tourism development. Based on the outcome of this research, further study is recommended to measure the economic impacts of eTAM in Bangladesh and in the wider scenario of the South Asian countries.

Keywords technology · eTourism · eTAM · adoption · satisfaction

Introduction

Boston Hospitality Review (2018) stated that digitisation is one of the most significant innovations in our rapidly developing world. Digital developments and technological innovations are correlated for growth and have global impacts, especially in

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manufacturing, Information and Communication Technology (ICT), travel and tourism services, and other services industries. ICT has transformed tourism worldwide. A creative system of tourism information must provide information on various output devices and take into account the spatial milieu of the corresponding data. In the adoption of digital tourist information services (Fritsch, 2001) the user-related presentation and location knowledge will be crucially relevant (“Customisation”).

Chen and Shih (2014) believed wearable technology was not a completely latest technology, but that we concentrated on the post-service era, when personal technology devices were turned into wearable gadgets. The age for digital tourism areas followed by thematic parks and theme destinations – began with the advent of websites of information; but this focused flow of information was one-sided and minimal. The rapid expansion of Information Technology (IT), especially of the Internet, has provided tourist and entertainment industry opportunities. Tourism is the largest industry in the world (Sheldon, 2001). The key features of the market structure and the functioning of new technology (Inkpen, 1998; Sheldon, 1997) were studied. Information-case studies were divided into all aspects of ICT applications in various areas such as hotels, travel agencies, tour operators, airlines services and etc.

E-commerce is described as the purchase and sale process or the exchange via computer networks, including Internet products, services and information, in particular (Lee & Turban, 2001). ICT is one of the main tools for e-commerce in the tourism industry and favors eMarketing as well as innovative technology marketing that mediate companies and consumers (Brodie et al., 2007). In e-commerce/e-travel/e-tourism produces one of the quickest growing instruments, for example telecom and IT, hospitality/marketing-strategic plan.

Today, the dimension of tourism has shifted which concentration in online media in replaced of the buzz of positive words, which is a big source of tourist’s information. Some of them focus on awareness requirements, information bases, navigation routes and the mindset of online tourism research (Pan & Fesenmaier, 2006).

ICTs include a whole range of electronic resources that enable organizations to operate and interact with stakeholders and their knowledge, functions and processes in their efforts (Buhalis, 2003).

eTourism in particular comprises three distinct disciplines: business management, IT and tourism. Figure 1.1 indicates the concept and its regions of eTourism. In general, eTourism comprises IT, industry and tourism (i.e. eCommerce, eMarketing, eTransport, eFinance, eHRM, eProcurement, and eProduction) as well as ePlanning and eManagement in all the sectors of tourism industry (Buhalis, 2003).

In Bangladesh; tourism is rapidly recognized as a largest growing economic industries in the world as an integral contributor of job development and wealth creation, economic growth, environmental conservation and alleviation of poverty. Tourism is a key contributor to meet the sustainable development goal (SGD) in Bangladesh while the growth of tourism 90% is domestic tourists and rest of them are international tourists. In Bangladesh; online marketing and promotional activities can be the most suitable and common way to deliver products and services, promote products, and pass digital information to the target market (Rahman &

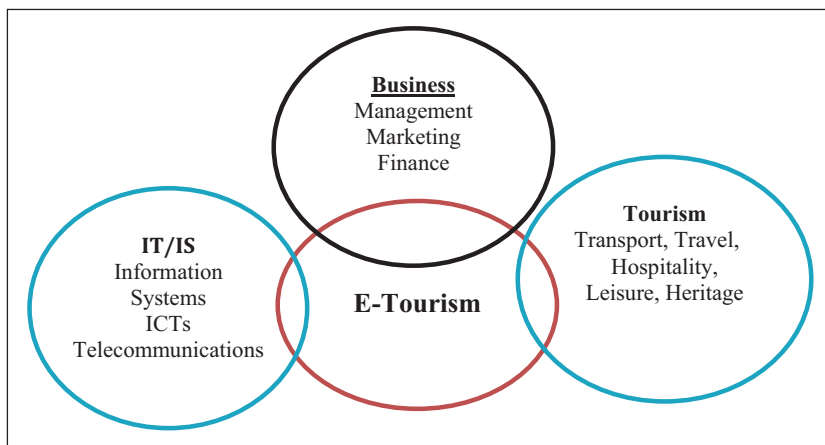


Fig. 1.1 eTourism concept and domains. (Source: Adapted from Buhalis 2003)

Rahman, 2020). During COVID-19 outbreak tourism sector is mostly affected due to travel restriction and majority domestic and international tourists order tourism (leisure and recreation) products through online that's eTourism getting popularity. During post-COVID-19, globally eTourism functions will be more popular to tourists and service providers to promote tourism products through online services at a cost effective way.

Tourism has a larger number of heterogeneous stakeholders than many others as a worldwide sector and as the largest supplier of workers on the planet. The industry's energy demand and growth is perhaps only expressed in its ICT growth (Buhalis & Law, 2008). The competitiveness of organizations is determined by e-tourism, which uses intranet systems to re-organize internal processes, extranets to conduct trading with trustworthy associates and the Internet to communicate with interest groups (Buhalis, 2003).

Buhalis and O'Connor (2005) found that e-Tourism will concentrate on consumer-centric technology to support the latest sophisticated and seasoned customers. At both the strategic and tactical levels of management, therefore, agile strategies are needed to establish "information structures that allow tourism organizations to manage their internal functions, relationships with partners and engagement with all stakeholders, including consumers". Sultana (2016) stated that Bangladesh is a naturally enrich country with world longest sandy sea beach, hilly mountains, flora and fauna, healthy weather, diversity of seasons, and technological application in tourism are key dynamics of sustainable tourism development. Despite the fact Deb (2020) found that eVisa, eTour, eReservation, eItinerary, eTicketing, and Virtual tourism have statistically important and accurate characteristics for mobile applications in eTourism.

Previous researchers have discovered a significant role in tourist studies for portable technical instruments i.e. notebook, laptop, smartphone have a positive impact on E-Tourism adoption (Tussyadiah & Fesenmaier, 2009; Green, 2002).

Nevertheless, tourism industry is now facing a range of innovative challenges as a result of market and environmental shifts that are shaped by technological innovation (Buhalis & Amaranggana, 2013). Moreover, few studies have been found in the era of eCommerce, eTourism, and technology adoption in tourism but there is no study has been conducted to the technological applications in tourism with model specification for adoption. Henceforth this study reflects on the footstep of electronic tourism acceptance model (eTAM) whereas study pointed on tourists' demand from tourism industry and available supply facilities of providers through intermediaries to meet the tourists' expectation and also take initiatives to develop a eTourism value chain network based on existing technology and tourism literatures.

This study examines the key success factors of technology acceptance theoretical framework and behavioral intention towards technology adoption in tourism. To develop electronic Tourism Acceptance Model (eTAM) in terms of demand site, supply site, intermediaries' service perspective, and expectation for tourists' satisfaction; at first the study bestows earlier adopted theoretical models. The inclusive purpose of the study is to assess and comprehend the tourists' expectation and experiences regarding eTourism Acceptance Model (eTAM). Conclusively perform a mirror image from literature review, qualitative interviews with experts, and draw conclusions with implication of the study.

Literature Review

Venkatesh et al. (2003) stated that the importance to accept the innovation of technology for further development of information dissemination thoroughly to the stakeholders by using the models of technology adoption (de Souza Dias, 2002). Users can select "Digital views" to display 360 degrees of space. The first interactive web-based tour of the facility consisted of a mix of views, a lesson map and equipment information. Moreover, triangulating the satellite signal around the globe is a function of Global Positioning System (GPS). Check the e-itinerary directly, check the flight and check the flight status, including information on delay, cancellations and gate departures, in real time (Berry & Seltman, 2007).

As culture becomes interconnected, and networks become omnipresent through the use of cell phones, society undergoes a fundamental transition, none more than in travel (Dickinson et al., 2014). Tourism information is primarily geographically linked and many valuable applications with knowledge of the area can therefore be offered.

The information services offered by mobile apps show that mobile phones can alter visitor behavior. Currently; Mobile device is considered as a key device for communication purposes in the society (Balachandran & Tan, 2015). Smartphone is also an inevitable tourism partner, and a fruitful basis has been built for mobile computer tourism. Likewise; smartphone is also an inevitable tourism partner and a fertile basement electronic tourism (Cheverst et al., 2000). Buhalis and Law (2008) have established three key axes for e-tourism research: consumption and demand;

technical innovation; and business. However, qualitative results of this study displayed that the information provided on Facebook is subjective and non-representative and therefore not credible while Triposo Travel Guides (TTG) pointed out that the tour application is useful to restaurant, hotel, tourist and tourist attractions, shopping and nightlife.

M-apps can be preferred to shopping as compared to a typical mobile browser (m-browser) for several benefits. Initially; m-apps overwhelmed the mobile navigation barrier since m-apps can be customized to the users (Wang & Wang, 2010). The use of mobile applications can be optimized. Second, the advantages of “ever on”, “ever on”, and flexibility help foster the effectiveness of consumer day-to-day tasks (Kim et al., 2013a, b).

Figure 1.2 shows the evolution of eTourism industry whereas online application, online payment, online order, and direct shopping, virtual service and virtual process are very crucial for eTourism development to change the physical atmosphere and introduce the virtual environment. As a result, both the service provider and the consumer benefited from improved market conditions.

Customer Centric Approach of eTourism

Generally, the population travels more often is linguistically and technologically skilled and is able to work in multicultural and challenging environments abroad. The Internet helps such “new” visitors and encourages them to pursue outstanding value for time and money (Buhalis & O’Connor, 2005). New innovations in the field of tourism attempt to meet their customers with tailor-made services and also compete with other retailers and distribution networks (Tsiotsou & Ratten, 2010). One of their most frequent uses is to share their own experience through social networks such as Facebook, Twitter etc. (Buhalis & Costa, 2006). Jain et al. (2013) revealed five drivers that influenced the adoptability of e-tourism services: utility, economics, reliability, quality and security.

Almer and Stelzl (2002) found that interactive multimedia information is embedded in thematically and locally-related data and provides for maximum tourist information online and offline on a spectrum of digital media. The device integrates satellite, GPS, Geographical Information System (GIS), Terrestrial images, tourist information and multi-media, 2D and 3D visualization and interactive navigation technologies (Fig. 1.3).

The essence of the aviation industry is related to the high level of passenger-aviation processes (Egger, 2013). Starwood Hotels has introduced the Google Glass Software (Android Community, 2014) of Google Favorite Guest (SPG). During tourist exploration, local maps and other needed information will react to messages while driving. In reality, personal technology intermediates between users and objects and technologies emerge and alter human perceptions in people and the environment (Ihde, 1990).

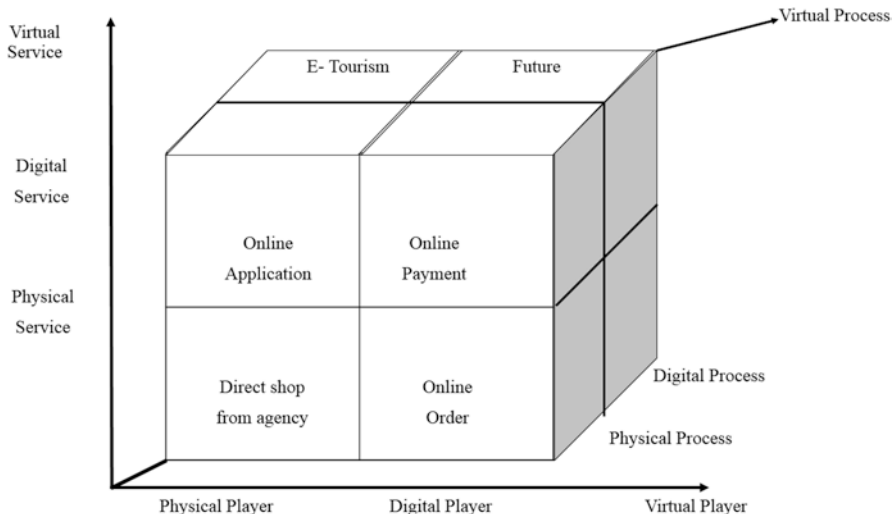


Fig. 1.2 Evolution of the eTourism industry. (Source: Adapted from Choi and Sirakaya 2005)



Fig. 1.3 Technology application in tourism. (Source: Adapted from Almer and Stelzl 2002)

The early innovations in ICT not only resulted in improved airlines’ capacities being used but also price compatibility and in the near future, the advent of the discount airlines resulted in industry innovation and in the forced production of all segments (Fig. 1.4).

In order to simplify the tourist’s choices, the factors are socio-economic commitment, cultural environment, family commitments, peer group pressure, tourists’ demographical variables (i.e. disposable income, education, market offering and others). Tourist’s decision-making process to visit a tourism destination depends on destination brand image and motivational factors like attractive tourism package, amenities, food and services, location, price, and promotional offer. To make a decision to visit a destination focal point is leisure time. In order to ensure tourism satisfaction, wireless technology, localization services, smart transport approaches, goal management frameworks, virtual realities and social media are essential (Ali &

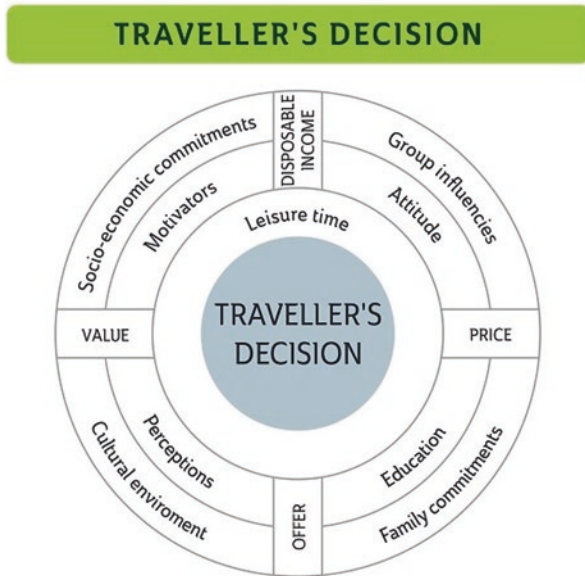


Fig. 1.4 Influencing factors of tourist’s decision. (Source: Adapted from Zsarnóczy 2017)

Frew, 2014). Currently tourism market is very competitive and tourists are looking for better opportunity. However, several tourism service providers were pushed out of the market that could not cope with new challenges.

Customer satisfaction is a crucial part in the era of hospitality and tourism. Gursoy et al. (2007) state that customer satisfaction on the goods and services of tourism is a prime aspect of sustainability and future development. Parasuraman et al. (1985) indicated that quality of service can also be described as exceeding customer expectations as well as customers, irrespective of service type, defined service quality using ten different criteria known as quality determinants likewise “physical elements, reliability, communication, consistency, protection, competence, compliance, accessibility and empathy”. Subsequently the numbers of these criteria were reduced to five namely “tangibles, reliability, responsiveness, assurance, and empathy” (Parasuraman et al., 1988) (Fig. 1.5).

Tourists’ centric order considered three stages of consumption in which pre-consumption stage includes planning, expectation, perception, and economic status. During the time of consumption Internet connectivity, navigation, durable or non-durable products terms and condition, and ePurchase option are mostly preferred but post consumption stage share their positive experience with the people, suggested to buy the tourism products, and revisit a destination for re-experience.

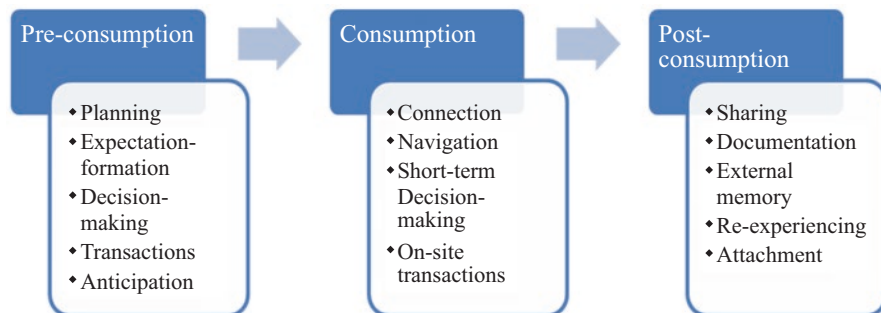


Fig. 1.5 Stages of Tourism Consumption. (Source: Adapted from Buhalis and Costa 2006)

Theoretical Framework of Technology Adoption

Several theoretical models were developed over the last 20 years to understand the actions of the implementation of IT and technological diffusion in the era of manufacturing and services area development as per global standard. To make a technology accepted conceptual framework for the tourism industry, it is essential to make a scrutiny on previous developed mostly acceptable theories of technology adoption.

In the eve of technology diffusion tourism services are mostly technology oriented, to proposed a technology based conceptual framework for tourism industry this study considered the concept of “Technology Acceptance Model (TAM)”, “Theory of Reason Action (TRA)”, “Theory of Planned Behavior (TPB)” and “Diffusion of Innovation (DOI)” (Davis, 1989; Fishbein & Ajzen, 1975; Rogers, 1995). In light of their limitations, some models were criticized. A significant number of models are not able to clarify predictive abilities with sufficient evidence of empirical outcome (Chaudhry et al., 2006). Consequently, this study decided to use “UTAUT” as the basic model and superior than current system (Venkatesh et al., 2003; Venkatesh & Zhang, 2010), and theory of tourism intermediaries and stakeholders for supporting (Sheldon, 97) whereas both are considering more acceptable for tourism industry.

Silva (2006) emphasizes the importance of not only providing an understanding of technological aspects, but also trying to understand the actions of the individual who is going to make use of the technology. Fishbein and Ajzen (1975) affirmed that Theory of Reasoned Action (TRA) related to the belief, subjective norms and attitude, which attempt to intentional behavior (Fig. 1.6).

TRA shows that people are rational and their behavioral pattern is more logical to evaluate pros and cons of beliefs and attitude towards act and subjective norms for behavioral intention.

Ajzen (1991) designed “Theory of Planned Behavior” (TPB) theory that attempts to predict and describe the actions of people for example in information systems, in some contexts while perceived behavioral control shows self-reliance in the access to resources and the basic behavioral likelihoods (Oliveira junior, 2006) (Fig. 1.7).

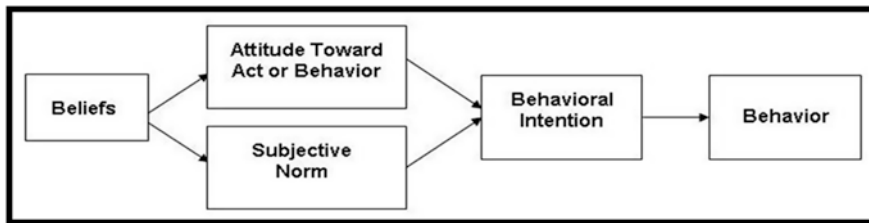


Fig. 1.6 Theory of Reasoned Action (TRA). (Source: Adapted from Fishbein and Ajzen 1975)

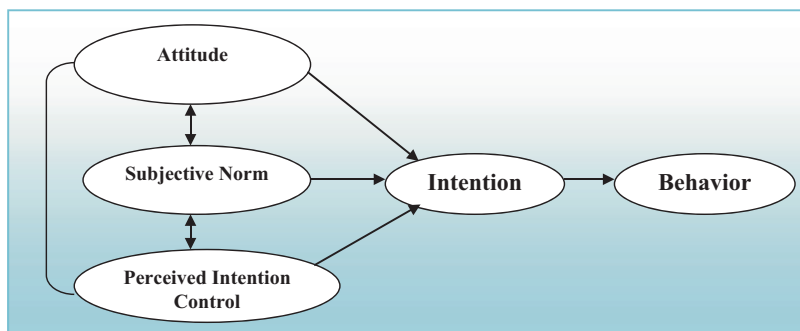


Fig. 1.7 Theory of Planned Behavior (TPB). (Source: Adapted from Ajzen 1991)

TPB Theory stated that attitude towards technology; perceived control on technology uses behavior, and users’ theoretical norms influences to predicted behavior towards technology adoption. Moreover; Davis (1989) focused on “Technology Acceptance Model (TAM)” which is known as popular model for technology diffusion based on earlier stated Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975) (Fig. 1.8).

Moreover, Davis (1989) defines the two main determinants of TAM on the following way: (i) The degree of perceived utility describes that person usual belief usages of certain technology enhance his performance; (ii) Perceived use measure the degree of person confidence towards free of effort information. Furthermore; usefulness, ease of use, attitude, and relative advantages are considered critical success factor of technology acceptance nevertheless the mentioned factors are connected with “Unified Theory of Acceptance and Use of Technologies (UTAUT)”. Pheeraphuttharangkoon (2015) affirmed that UTAUT notes that population dynamics, performance expectations, planned programs, peer group pressures, structure of the society, accessibility and user experience are essential factors for the intended actions and use of technology; while UTAUT is a model to describe the key factors of behavioral intention of technology (Venkatesh and Zhang, 2010) (Fig. 1.9).

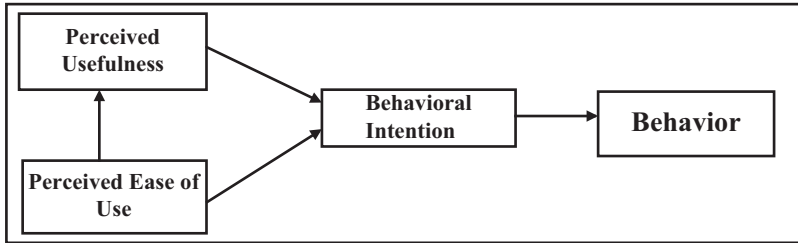


Fig. 1.8 Technology Acceptance Model (TAM). (Source: Adapted from Davis 1989)

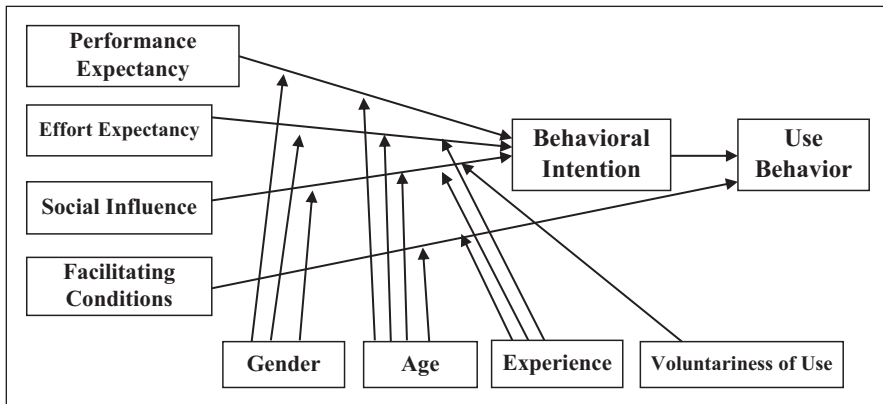


Fig. 1.9 Unified Theory of Acceptance and Use of Technology. (Source: Adapted from Pheeraphuttharangoon 2015)

Tourism Intermediaries and Stakeholders for Tourist Satisfaction (Fig. 1.10)

To make sure the satisfaction of tourists’ Sheldon (1997) developed a framework named e-tourism intermediaries and stakeholders in which market research and experts viewpoints are considered as a foundation and destination organization and government support are considered facilitating factors and available services for tourists (i.e. hotels, airlines, attraction, and entertainment facilities through travel agent, tour operator, and special channel based tourists’ expectations).

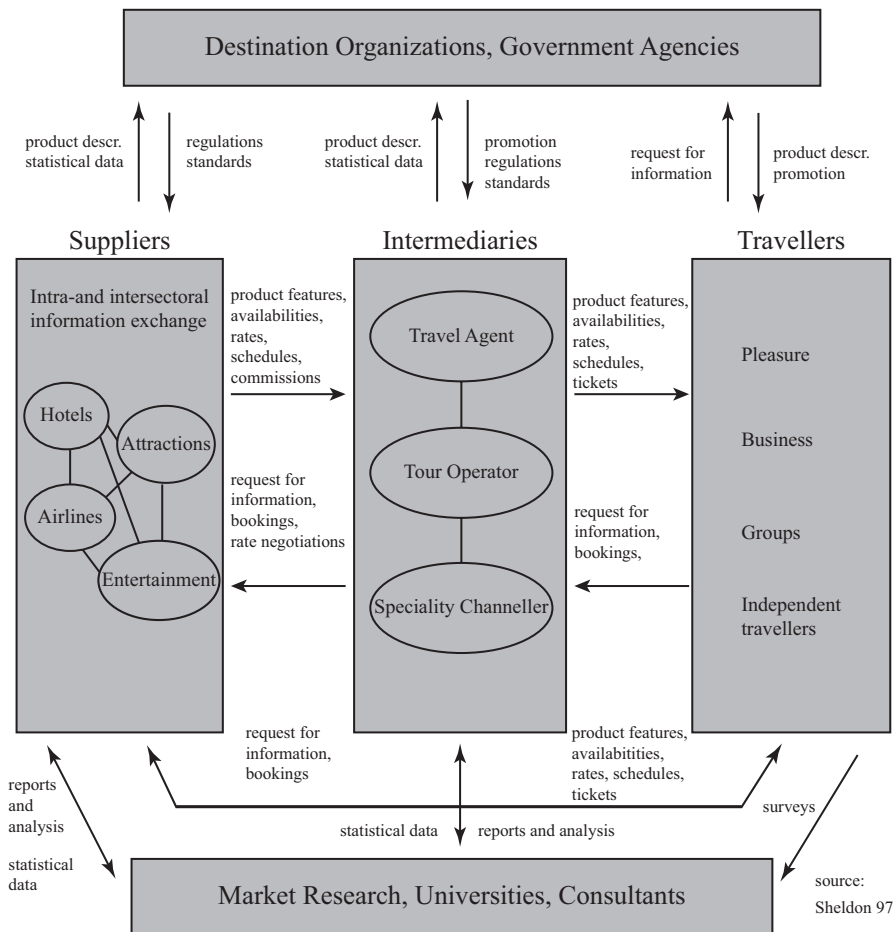


Fig. 1.10 eTourism intermediaries and stakeholders. (Source: Adapted from Sheldon 1997)

Linkage Between the Tourism, Travel, and Hospitality Industry: Tourism Supply

To provide a better service among domestic and international tourists is required a good linkage between travel, tourism and hospitality industry. Tourists are looking for good quality food, accommodation, and transportation at a reasonable price. Tourism planning and development plays a substantial role to promote tourism attraction and branding the destination. Figure 1.11 below shows the linkage components of travel, tourism, and hospitality industry.

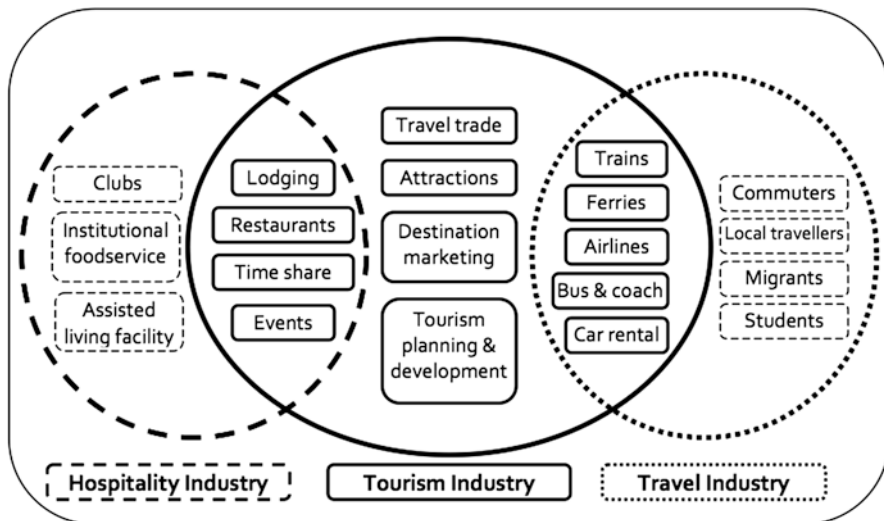


Fig. 1.11 Relationship between the tourism, hospitality and travel industry. (Source: Adapted from Pizam 2009)

Method and Materials

A mixed method has been considered as a wide range of study and make the study more comprehensive, to explore the barriers and motivational factors for eTourism adoption (Creswell, 2013). Initially this study considered literature review from previous studies based on secondary sources in which investigated technology applications in tourism and to identify the critical factors of eTourism adoption.

To generate the primary data from the respondents were asked about what are the factors affecting the adoption of eTourism in Bangladesh, at present what is the gap between demand and supply of Tourism industry in Bangladesh, suggestions related to minimize the gap between demand and supply, what are the factors affecting the value chain network for tourist satisfaction, and tourists' future expectations towards electronic tourism. Data collected from in-depth interview of 15 respondents through a semi-structured questionnaire and open ended discussions (see respondent profiles in Table 1.1 below)

The profile of the respondents shows that majority of the respondents are male (80%) and depth interview conducted from tourist (33.33%), academician (20%), tourism expert (26.7%), and service providers (20%) to identify get a clear idea regarding the factors of eTAM.

All of these in-depth interviews were conducted over the telephone, audio-recorded and had the duration between 10–15 min. These were manually transcribed for analysis. The most relevant statements generated from these interviews are presented in the next section of findings and discussions.

Table 1.1 Profile of the respondents

Variables	Respondents N = 15	Frequency (%)
Gender		
Male	12	80
Female	03	20
Occupation		
Academician	03	20
Tourism Expert	04	26.67
Tourist	05	33.33
Service providers	03	20
Education Level		
PhD	03	20
MBA/Masters	07	46.67
BBA/Honors	05	33.33
HSC	0	0
SSC	0	0
Marital Status		
Single	5	33.33
Married	10	66.67

Source: survey results

Findings and Discussions

Factors of Technology Acceptance Model and eTourism as Summarized from Reviewing the Existing Literature Studies

Previous research studies have demonstrated the impact of various technology adoption theory models on behavioral intention, intention to use, desire, and actual use of technology, as well as the factors that influence technology adoption in developed and developing countries around the world. Results are summarized in Tables 1.2 and 1.3 below.

Technology or requirements to allow the use of the technology apply to the available technological infrastructure (Van Biljon & Kotzé, 2007). The aim to use an expected model includes TAM, UTAUT, TRA, TPB and DOI theory principles and constructs. Many studies have employed a theoretical structure that incorporates models or theories (Chen & Chen, 2009; López-Nicolás et al., 2008).

Factors Relevant to Technology Acceptance and eTourism as Summarised from In-Depth Interviews

Tourism is a growing industry in Bangladesh, which has a valuable contribution to employment and economic development.

Table 1.2 Factors of technology acceptance model

Title	Theory – Model	Key factors	Source
Analyze factors affecting adoption of Smartphone	TAM	Wireless Internet, Multimedia, Post-purchase service, Technology application	Kang et al. (2011)
A study on the adoption and use of the Smartphone by older adults	TAM, UTAUT, DOI	Compatibility, Effort expectancy, Social influence	Choudrie et al. (2014)
Investigating consumers’ behavioral intentions when it comes to using mobile wireless technologies	TAM	Perceived Ubiquity, Perceived Usefulness, Relevance, Behavioral intention	Kim and Garrison (2014)
Investigate the factors that affect Chinese users’ intentions to use Smartphones	Theory of Reasoned Action (TRA)	Innovation, Entertainment, Attitude, Subjective norms	Ling and Yuan (2012)
To investigate the factors that influence Thai elderly people’s willingness to use smartphones for e-health services	UTAUT	Perceived value, Usefulness, Effort expectancy	Boontarig et al. (2012)

Source: Constructed by the author

One of the academic respondents stated that “electronic tourism acceptance depends on social media marketing, destination attraction, ePromotion, eBranding, eTravel Package, eGuideline for ecotourism, and Virtual tourism”.

Then, one of the tourism expert respondents stated that “eBanking facilities for tourism, ambient attractions, wildlife, superstructure’ are significant factors for electronic tourism adoption”.

The tourist respondent stated that “eShopping facilities, eTicketing, eReservation, ePayment, destination map, reliability and security, and cloud tourism are required for satisfaction”.

The service provider respondent stated that “prompt service, 24/7 service, online order and payment, tourism destination map, location tracker, eBranding, ePromotion; eTourism Package; eDatabase, Tourism eBanking, Virtual tourism, and Reliability & Security of services are essential for value creation and tourists’ satisfaction”.

Grounded on all the technology acceptance models and qualitative data from academicians, professionals, tourism experts and tourists, this study design proposed eTourism Adoption Model (eTAM).

Table 1.3 Critical factors of technology applications in eTourism

Source	Dimensions	Topic
Chiu et al. (2005)	Quality of service, Usefulness, quality, Ease purchase	eTourism
Jonathan and Tarigan (2016)	ICT, eMarketing, eTourism	eTourism effect on Economic Development
Condratov (2013)	eTourism, ICT, Internet, Marketing, Market	Concept and evolution of eTourism
Buhalis and Law (2008)	Demand dimensions, Technological Innovation	eTourism
Jain et al. (2013)	Economic, Security, Reliability, efficiency	eTourism services adoption
Berry and Seltman (2007)	eItinerary, Flight status, Delay & Cancellation details	Technology application in Tourism
Buhalis (2003)	eCommerce, eMarketing, eManagement, ePlanning, eTransportation	Concept of eTourism
Conyette (2015)	Smartwatch, Phototags, Check in data	Destination Selection
Tan et al. (2017)	Effort expectancy, Social Influences	Mobile Applications in Tourism
Jain et al. (2013)	Online ticketing, Online promotion, Secure transaction, Online check in	Adoption of eTourism Services
Atembe (2015)	Accessibility, Travel history, Virtual tourism	Uses of wearable device in tourism
So et al. (2014)	Tourism Brands, Cultural and Mega events	Tourism brands and customer engagement
Deb (2020)	eVisa Processing, eTour guide, eReservation, eItinerary, eTicketing, Destination Map, and Virtual Tourism	Mobile applications in eTourism
Ramos and Rodrigues (2010)	Internet, cost, and Technology	Online tourism demand
Farkhondehzadeh (2013)	Hotels, airlines, travel agencies	ICT in Tourism
Mohamed and Moradi (2011)	eMoney transfer, online payment, eTicketing, eReservation, Website, Infrastructure	Foreign tourists satisfaction towards eTourism
Pizam (2009)	Attraction, Time Share, Events, Destination Marketing, Restaurants, Lodging	Hospitality Industry and Travel industry linkage

Source: Constructed by the author

Proposed Electronic Tourism Adoption Model (eTAM)

eTourism Adoption Model (eTAM) is proposed on the basis of key findings from the relevant literature review and in-depth interviews. This model describes that to provide digital services to the customer/tourist focal point is Internet and technological innovation. eTAM focus on the tourists' demand, industry supplies, intermediaries support, paradigm of tourists, and tourist expectation (Fig. 1.12).



Fig. 1.12 Electronic Tourism Adoption Model (eTAM). (Source: Developed by the author 2020)

Due to the technological diffusion tourists demand are mostly social media marketing, eAwareness, ePlanning, eDestination branding, eGuideline for Eco-tourism, eTrade show, eArcheological tourism promotion, eDestination Branding, eMarketing, ePromotion, eTravel Package, and Virtual tourism. On the other hand, eTourism supply site comprises of restaurants, food & beverage, eOrder and delivery, lodging, eEvents, hotel/motel/resort, time share, people and process, ambient attractions, heritage sites, sport facilities, mega event attractions, cultural events, religious events, wildlife, and superstructure provides better satisfaction of tourists. To measure the satisfaction of tourists which depends on the quality of service providers and intermediates services for example tour operator, travel agent, booking centers, online travel agencies, destination marketing organization (DMO) delivers professional and quality services to domestic and foreign tourists for positive experience of a tourism destination that assists to make a good brand image of a nation. Satisfied tourists are considering spokesperson that spread positive word of mouth for

tourism branding in locally and celebrity spokesperson assists to country branding to the international tourists.

Theoretical Justifications of eTAM

Buhalis (2003) explored that eTourism digitalises the entire value chain and process for the travel, tourism and hospitality sector, enabling businesses to improve their performance and productivity. This definition clarifies that electronic tours are the digitalization of all travel, hospitality, tourism and catering value chains, and practices. Moreover, from the tourists' perspectives 'value chain' is a critical factor in which involves cooperation and communication with channel partners, who can be vendors, mediators, third party service providers, and customers. In essence, supply chain management combines the management of supply and demand inside and over the industries. The effective way of relocate and redistributed the risk, and provides essential services as per expectation creates value (Ricketts et al., 2014).

Due to digitalization, tourists' expectation is increasing day by day that is why it is critical to get depicts about the preferences and choices of tourists through tourism database (i.e. traveler profile, traveler location, traveler latent demand) is significant aspect. On the other hand; eBranding is an essential part for the adoption of eTourism whereas eBranding enhance lively online communities, user-friendly site, ePromotion, eMarketing, mobile marketing through social media. Deb and Roy (2015) mentioned that eTourism facilities, attractive tourism site, eService, usefulness; and eSecurity are significant for eTourism adoption in Bangladesh, which represents most of the variables are similar with this study. Today eTourism value chain one of the key focus points is virtual tourism which helps to promote tourism through destination promo, video presentation of a tourism place, virtual reality, and spoke persons who provides positive message to the people to visit a tourism destination for recreation.

Implications of eTAM in the Tourism Industry

Over the decades, tourism has continued to expand and become world rapidest growing economic sectors with deepening diversification. Digitalization and use of new technologies have changed our outlook and perception of the tourism services. Modern tourism has strong links with a rising number of new destinations and technology application in tourism for socio-economic growth of a nation.

In Bangladesh the users of Internet are increasing day by day and most of them are smartphone users while smartphone provides computer enabled all the facilities and information to the tourist. Therefore, prompt service, 24 h in a week any time service, online order and payment, tourism destination map, location tracker, reliability and security have become a crucial factor to the tourists so that tourism

service providers offers better quality food and beverage with home delivery services, 5*, 4*, 3* chain hotels, leisure hotels, and city hotels providing better accommodation for domestic and international tourists with room service facilities at a reasonable cost. Socio-economic condition of Bangladesh is increasing as a surprising rate so that tourist's eServices demand boost in social media marketing, eTourism package, ePromotion, eBranding, and virtual tourism that is why Bangladesh Tourism Board (BTB) developed tourism destination promotional videos with foreign celebrities for country branding. Bangladesh Parjatan Corporation (BPC) provides accommodation, food & beverage, and even in Dhaka restaurants business included Robot to serve food and other services to the customer while eReservation, eMarketing, eAwareness through social will be a best option to attract more international tourists. In Bangladesh travel and tourism mediators for example; tour operators, travel agencies, DMO, booking centers have to use eService's in the area of shopping, cloud tourism, Travel Package, time share, and even in cultural events to generate competitive advantage and tourists' satisfaction.

eTourism is a modern way to think, plan and observe the holidays. Smartphone, laptops and tablets are constantly being used to book flights and hotels. They prefer to also chat about and submit their stay photos and videos. During eTourism, travelers share their views and experience before they go on a ride, during the journey and after the social networks holidays is related to the promotion of eTourism.

Go global and think Big is a common aspect in the tourism industry. Both concepts play a boosting role for tourism in globally even also in Bangladesh that is why each tourism organization thinks about tourism revitalization through technology value chain model. Most of tourism service providers change their business notion and turn into digital tourism (eTourism) which is environmental friendly, mega online database about the choice and preferences of tourists, ePayment facilities throughout debit card, credit card, and priority pass etc. provided by banks. All the services of the values chain are interlinked between tourists' expectation and satisfaction. Government tourism supporting agencies are also encouraging digital tourism for green environment and sustainable development.

Amid the use of eTAM model, the stakeholders of tourism industry will get a clear depicts on the challenges and opportunities of eTourism adoption in Bangladesh but this model can be applicable in any country eService development in tourism sector. Government should have to develop technology-based infrastructure, and make a master plan for tourism development besides these stakeholders will have to take the opportunity to attract domestic and international tourists to revive the business at a profit with tourist satisfaction.

Conclusion and Further Direction of Study

eTourism plays a crucial part in developed and developing countries' socio-economic growth. It offers the chance to diversify the economy and plays a major role in rising living standards and lifting people beyond the poverty line. Technology

adoption in tourism business has both challenges and opportunities in the emerging economy though the competition of tourism business increases dramatically due the expectations of tourists.

This study developed electronic tourism adoption model (eTAM), which processes the theories of technology acceptance, based on TAM, TPB, TRA, UTAUT, eTourism intermediaries and stakeholders model for customer behavior towards technology applications in tourism. Proposed model provides factors of value chain that is closely connected with eTourism adoption model. This model provides appropriate information on eTourism key factors for adoption, which can help the government and concern tourism development agencies for policy making, demand assessment, customised services, eco-tourism guidelines, a master plan for sustainable tourism.

Social media are becoming increasingly important for the user to schedule and enjoy traveling online and mobile. Visitors are linked socially not only before and after but also more and more by mobile devices. In response, the tourism industry should make much more extensive use of social media. International IPK (2012) stated that social media are fetching more significant to make a plan of customer and enjoy the travel with mobile technology and broadband facilities.

Today social media (i.e. Facebook, Instagram, LinkedIn, WhatsApp, and others) are became a crucial platform for promoting and branding tourism destinations to the domestic and international tourists. Tourists are now combating the latest digital technologies that can enhance tourists' customised services and online meaningful interactions-the Web 3.0. Moreover, next generation will be more focus on the reliability and privacy of eTourism services.

This study focus on the technological applications in tourism sector with a propose tourism acceptance model adoption. Further study is recommended to measure the economic impact of eTAM in Bangladesh and a comparative study can be conducted in between South Asian countries. It is also recommended that a profounder study can be carried out to discover tourists' attitudes towards technology adoption intention in tourism industry.

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