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The Impact of Technology in the decision-making process of a tourism destination

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Master in Management

Supervisor:

Professor Dr. Mónica Mendes Ferreira, Invited Assistant Professor,
ISCTE – Instituto Universitário de Lisboa

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BUSINESS
SCHOOL

Department of Marketing, Strategy and Operations

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Resumo

Com o tópico da tese definido, foi possível perceber que embora esta seja uma problemática a ser alvo de atenção por parte de investigadores, ainda existe espaço para uma profunda pesquisa teórica e científica.

Para atingir o objetivo principal de analisar o impacto da tecnologia no processo de tomada de decisão de um destino turístico, foram definidos quatro tópicos principais de investigação: Onde os turistas procuram informação; Qual é o tipo de informação mais pesquisado na hora de decidir um destino; Qual a tecnologia móvel que os turistas mais usam quando viajam; Qual a variável que mais influencia a percepção de um destino turístico.

Para este estudo, foi analisada a literatura existente mais relevante, desenvolvido o modelo conceptual e formuladas as hipóteses em foco para este estudo. De seguida, todos os dados foram recolhidos através de um questionário online.

Os resultados mostram que, com exceção da variável tecnologias emergentes, todas as variáveis têm uma influência significativa na percepção de um destino turístico. Além disso, as principais conclusões são que a maioria dos respondentes procura informações na internet; principalmente informações sobre o alojamento e o destino; a tecnologia móvel que a maioria usa durante as viagens é o smartphone; a variável que mais influencia a percepção de um destino é a sua localização.

É importante que os destinos turísticos entendam que se os turistas tiverem uma experiência incrível, eles irão estar mais dispostos a partilhá-la *online* e *offline*, o que contribui para a percepção que futuros turistas criam sobre o destino.

Palavras-chave: Turismo; Tecnologia; Imagem do Destino; Marketing Digital

JEL Classification System: M30 – Marketing and Advertising: General; M31- Marketing and Advertising: Marketing

Abstract

With the topic of the thesis defined, it was possible to understand that although this is an issue that has been gaining the interest of researchers, there is space for further theoretical and scientific investigations.

In order to reach the main goal of analyzing the impact of technology on the decision-making process of a tourism destination, it was defined four main research topics: Where tourists search for information; What is the most searched kind of information when deciding a destination; Which mobile technology tourists use the most when traveling; Which variable influences the most one's perception of a tourism destination.

For this study, it was first analyzed the most relevant existing literature, developed the conceptual framework and the hypothesis in focus for this study were formulated. After this, all data was collected through an online questionnaire.

Results show that, with the exception of the variable emerging technologies, all variables have a significant influence on the perception of a tourism destination. Besides this, the main conclusions are that most of the respondents search information on the internet; the information that is most searched are both the accommodation and destination; the mobile technology that most respondents use while travelling is the smartphone; the variable that influences the most one's perception about a destination is its location.

It is important tourism destinations understand that if tourists have an amazing experience, they are much more willing to share it online and offline which contributes to the perception that future tourists create about the destination.

Keywords: Tourism; Technology; Image Destination; Digital Marketing

JEL Classification System: M30 – Marketing and Advertising: General; M31- Marketing and Advertising: Marketing

Table of Contents

| | |
|--|----|
| Chapter 1: Introduction | 1 |
| Structure of the Thesis | 1 |
| Chapter 2: Literature Review | 3 |
| Definition of Tourism | 3 |
| Marketing and Tourism | 4 |
| Digital Marketing and Tourism | 9 |
| Technology and Tourism | 11 |
| Social Media and Tourism | 21 |
| Social Media/Technology and Tourist Decision Making | 22 |
| Consumer Behavior and Decision Making | 25 |
| Consumer Behavior in Tourism | 28 |
| Chapter 3: Methodology | 39 |
| Scope and Objectives of the Investigation | 40 |
| Data Collection | 40 |
| Conceptual Framework | 41 |
| Hypothesis | 41 |
| Chapter 4: Result Analysis | 47 |
| Characterization Socio-Demographic of the Respondents | 47 |
| Chapter 5: Conclusions | 63 |
| Results | 63 |
| Academic Contributions | 66 |
| Practical Contributions | 66 |
| Limitation and Future Research | 68 |
| Bibliography | 69 |
| Appendix | 77 |
| Appendix A: Questionnaire | 77 |

List of Tables

| | |
|---|----|
| Table 2.1- Main theoretical concepts in the tourism sector..... | 35 |
| Table 4.1-Nationality..... | 48 |
| Table 4.2- Education Level..... | 49 |
| Table 4.3-Professional Situation..... | 49 |
| Table 4.4- Main purpose of the trips..... | 49 |
| Table 4.5- With whom do you normally travel with..... | 49 |
| Table 4.6- Number of trips per year..... | 50 |
| Table 4.7- Where do you search for tourism information?..... | 50 |
| Table 4.8- What kind of information do you search?..... | 51 |
| Table 4.9- Do you rely on mobile technology when travelling?..... | 52 |
| Table 4.10- Which mobile devices do you use the most when travelling?..... | 52 |
| Table 4.11- I tend to use travel review sites when searching for a travel destination. If yes, which ones?..... | 53 |
| Table 4.12- I tend to actively participate in the rating of accommodation, restaurants or attractions on online travel reviews/rating sites. If yes, which ones?..... | 54 |
| Table 4.13-I tend to look for the rating of destinations, restaurants, accommodation or attractions/activities. If yes, where?..... | 54 |
| Table 4.14- I tend to give my review on online travel review sites. If yes, which ones?.... | 55 |
| Table 4.15- I tend to share my travels on social media. If yes, which ones?..... | 55 |
| Table 4.16- Binominal test..... | 57 |
| Table 4.17- T-test for 1 sample..... | 59 |
| Table 4.18- Location is a relevant aspect when deciding a tourism destination..... | 59 |
| Table 4.19- Descriptive Analysis of “Location is a relevant aspect when deciding a tourism destination” | 60 |
| Table 4.20- Test Statistics..... | 60 |
| Table 4.21- T-test for 1 sample..... | 61 |
| Table 4.22- Summary of the analyzed hypothesis..... | 62 |
| Table 5.1- Correlations between age groups and all hypothesis..... | 64 |
| Table 5.2- Descriptive Information..... | 64 |

List of Figures

Figure 2.1 Cycle of travelling.....3

Figure 2.2- Consumer Decision-Making Model.....27

Figure 2.3- Antecedents of Consumer Involvement28

Figure 2.4- A Continuum of Buying Decision Behavior.....28

Figure 3.1- Conceptual Framework.....41

Figure 4.1- Sex of the respondents.....48

Figure 4.2- Age of the respondents.....48

Chapter 1: Introduction

In the space of a few years, there has been a rapid growth of digital media, which has influenced the tourism market. All of these changes caused consumers to search information regarding the tourism sector in different places other than from commercial sources, because they now can share their experience between each other, they can talk directly to tourism companies and to destination marketing organizations (Xiang & Gretzel, 2010).

Due to these new ways of a potential future tourist to shape their own image regarding a destination, some questions arise, hence why this dissertation aims to characterize the impact of technology on the decision-making process of a tourism destination. In this sense, its conclusions are placed at four levels:

1. Understanding where tourists search for information;
2. Understanding what is the most searched kind of information when deciding a destination;
3. Which mobile technology tourists use the most when traveling.;
4. Which variable influences the most one's perception of a tourism destination.

Structure of the Thesis

This study is divided in five chapters. In the first chapter it is characterized which type of thesis it is going to be done, followed by a brief introduction to thematic of the thesis and by the main objectives of this thesis. Lastly, it is explained the type of methodology that is going to be used.

In the second chapter the literature review is explained, which is divided into eight different sections. In the first section, it is possible to go through the definition of tourism. The second section, explains the link between marketing and tourism and analyzes marketing concepts applied to the tourism industry. After this first view on marketing and tourism, the third section explores more in depth the impact of digital marketing in the tourism sector. In the fourth section, the topic that is covered and explained in detail is the connection between technology and the tourism sector and how this sector is integrating technology into its business. The fifth section clarifies the impact of social media in the tourism sector. The sixth section dives deep in the main question of this thesis which is if social media and technology have any

influence in the tourist decision making. After analyzing this correlation, the seventh section has the objective to point out how consumers behave and what is the process of a consumers' decision making. Also, in this section, the decision-making process in the tourism sector is presented. Lastly, in the eight section the main online platforms in focus in this study are revealed.

In chapter number three, the methodology, the objectives and the scope of this research, and the hypothesis are presented. In chapter four the results of this study are presented and analyzed in detail. In the fifth and last chapter, the results, the academic and practical contributions and the limitations of this research and suggestions for future researches are presented.

Chapter 2: Literature Review

Definition of Tourism

Tourism can be defined on two spectrum, demand-side or supply-side. The demand-side of tourism can be defined as "*the activities of persons travelling to and staying in places outside their usual environment for more than one consecutive year for leisure, business and other purposes*" (WTO and UNSTAT, 1994); and the supply-side of tourism can be defined as "*all of those firms, organizations and facilities which are intended to serve the specific needs and wants of tourists*" (Leiper, 1979).

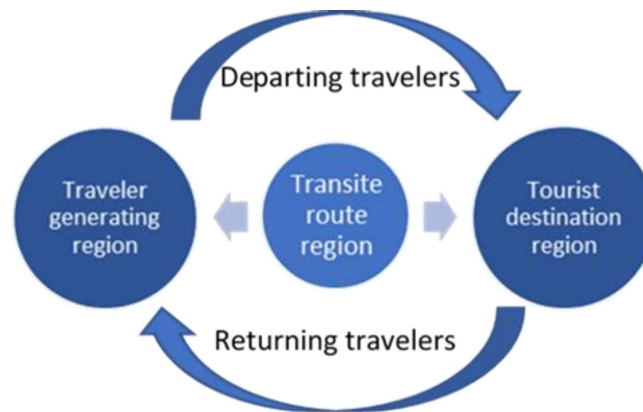


Figure 2.1: Cycle of travelling
Source: Leiper, 1990 in Cooper et al., 1999

One of the most important, if not the most important, part of tourism is the destination. According to the World Tourism Organization (1999), a tourism destination is "*a physical space with or without administrative and /or analytical boundaries in which a visitor can spend an overnight, a cluster of products and services, and of activities and experiences along the tourism value chain and a basic unit of analysis of tourism*". On the other hand, Cooper et al. (p. 102, 1999) defined destination as "*the focus of facilities and services designed to meet the needs of the tourist*". It is the opinion of the authors that a tourist destination gives useful information regarding the tourist movement and what impact and importance does it has. The destination has the capacity to collect all information regarding tourism information such as demand, transportation, supply and marketing. The authors understand a destination as the most important element of the Leiper's tourism system, due to the fact that it is the destination's images that attract tourists, encourages the visit and thus stimulating the entire tourism system.

Although destinations are different from each other, they all have at least four characteristics in common, which are the fact that destinations are "*amalgams, cultural*

appraisals, inseparable and not just used by tourists but also by many other groups” (Cooper *et al.*, p. 102-103, 1999).

Amalgams are “*the mix of facilities and services at a destination*” (Cooper *et al.*, p. 103, 1999), such as attractions, amenities (such as accommodation, food, entertainment and retail services), accessibility (local transportation, transportation terminals), and ancillary services in the form of local organizations. According to Buhalis (2000), destinations consist in amalgams of tourism products and services.

Destinations are cultural appraisals because tourists need to acknowledge a destination as being attractive and worth the visit with all that entails visiting another place (money and time). People have been visiting other places due its uniqueness, so it is important protect the difference between the destination and the home atmosphere in order to avoid the evolution of “*uniform tourism landscapes*” (Cooper *et al.*, p. 103, 1999).

“*Tourism is consumed where it is produced*” (Cooper *et al.*, p. 104, 1999), this means that tourists must be physically present in a destination to understand what tourism is. One of the major issues when it comes to destinations is the fact that most of them suffer a lot of pressure every year during a specific period of time, which means that during that time of pressure and heavy tourism activity most of the services have to be profitable enough to make up for the fixed costs they have throughout the rest of the year.

Destinations most of the time only serve residents or workers but during the time of the year when a destination might feel more pressure and heavy tourism it also serves tourists, so it is safe to conclude that most destinations have a multiple use (residents, workers and tourists). Actually, only destinations like theme parks are 100% focus on tourists.

Marketing and Tourism

A lot of authors have defined the concept of marketing, one of the very first was Kotler which defined marketing with the help of Levy (p.10, 1969), “*as the task of finding and stimulating buyers for the firm's output. It involves product development, pricing, distribution, and communication; and in the more progressive firms, continuous attention to the changing needs of customers and the development of new products, with product modifications and services to meet these needs.*”. However, there were other authors that tried to define the term ‘marketing’, Stanton (1978) defined it as being “*a total system of business activities designed to plan, price, promote, and distribute want-satisfying goods and services to present and*

potential customers” (p.5). While Kotler and Armstrong (p.6, 1999), defined it as “a social and managerial process by which individuals and groups obtain what they need and want through creating and exchanging products and value with others”.

Following McCarthy’s (1978) line of thinking it is possible to apply the four P’s to the tourism industry. According to Buhalis (2000, pp.109), *“developing a marketing mix for destinations will depend on each destination, the types of target markets and a whole range of issues on the external environment.”*

The first P is the Product, which in the tourism market could be *“culture, nature, health, activity holidays and business tourism”* (Shengnan & Nedelea, p.1, 2019). Buhalis (2000, pp.109) defended that *“destinations are amalgams of individually produced tourism amenities and services and a wide range of public goods. All these elements are branded together under the name of the destination. Although the tourism product for a region is very subjective for each prospective traveler and depends heavily on his/her image and expectations of the place, it consists of the entire range of facilities and services offered locally, plus all socio-cultural, environmental resources and public goods.”*

The second P is the Place, the destination can attract visitors in a direct way or in an indirect way. The difference between attracting visitors in a direct way or in an indirect way is the fact that the indirect way is done through a *“tourism distribution channel such as travel agents”* (Shengnan & Nedelea, p.7, 2019) while in the direct way the tourist visits the destination on his/her own.

The third P is regarding Promotion. Promotion in the tourism sector can be done through the *“mix of advertising, print & electronic material and direct mail”* (Shengnan & Nedelea, p.3, 2019). According to Buhalis (2000, pp. 110-111), *“distribution or marketing channels are defined as sets of interdependent organizations involved in the process of making a product or service available for use or consumption. The ultimate objective of distribution channel can be summarized as: delivering the right quality and quantity of a product, in the right place, at the right time, at the right cost, to the right customer. Apart from influencing costs, increasingly distribution channels also support and enable product differentiation by adding value on the product and by contributing to the total brand experience and projecting powerful images”.*

Lastly, the fourth P is the Price. The price is one of major important aspects when traveling since the cost of transportation, accommodation, restaurants, leisure activities differs from destination to destination. For Buhalis (2000, pp.110), *“pricing is a difficult process for*

destinations as it is often determined by the pricing and marketing policies of individual enterprises both at the destination and distributors at the place of origin. Local suppliers can have their own policy and thus coordinating and establishing a destination wide pricing strategy is almost unachievable. Furthermore, national economic policies and economic conditions in the international marketplace also influence pricing. Therefore, both macro and microeconomics determine the pricing function of tourism organizations locally and destinations. The cost of living and employment, as well as inflation, exchange rates and local efficiency and competition all contribute to the pricing equation”.

In order to understand in a more profound way what does marketing mean, it becomes essential to understand some concepts like needs, wants and demands; products; value and satisfaction; exchange, transactions, and relationships; and market.

Firstly, it is important to notice that people satisfy their needs and wants with products, and so a product is “*anything that can be offered to a market to satisfy a need or a want*” (Kotler & Armstrong, 1999). The authors make it very clear that a product does not have to be a physical object, but rather anything that is capable of satisfying a need can be called a product. Because people can decide what satisfies their own individual needs, the concept of product includes physical goods, services, and other ways that can satisfy consumers’ needs and wants.

Consumers make purchasing decisions based on their perceptions of a product’s value. This means that each individual consumer when buying a product always assesses which product will fulfill all of his/her wants and needs, which of the products available brings them more customer value.

Thirdly, marketing exists when consumers decide to satisfy their needs and wants through exchange. Exchange is “*the act of obtaining a desired object from someone by offering something in return*”. Exchange has always been present in the world, since the early days when each person would produce the one thing that they were good at producing and then people would exchange between them what they produced for what they needed. There are a few conditions that have to be taken in place in order for an exchange to happen. The first one is that it must involve at least two parties, and each party must have something of value to the other. The second condition is that each party must want to deal with each other and must be free to accept or reject the other party’s offer. The third and final condition is that each party must be able to communicate and deliver. It is up to each party to reject or accept the offer so it is possible to assume that if both parties reach to an agreement, both of them are better off

with the exchange. In Kotler and Armstrong's point of view, a transaction "*consists of a trade of values between two parties*" (p.9, 1999). This means that in a transaction it has to be clear to understand that party A gives *W* and in return receives *Y*. There are also conditions for a transaction to happen, which are that it involves at least two things of value, conditions previously determined, a time of agreement and a place of agreement. Finally, there is also the concept of relationship marketing which basically entails the building of a long-term relationship with customers of value, distributors, dealers and suppliers. This concept is based off the assumption that once you build strong relationships, profitable business will follow.

Last but not least, a market is "*the set of actual and potential buyers of a product*" (p.10, 1999). There are three types of markets, 1) self-sufficient market; 2) decentralized exchange market; 3) centralized exchange market. The self-sufficient market, people collect all the needed goods for themselves. This means that each person is less efficient at what they are good at. In the decentralized exchange market, people look at other people as potential buyers and so they trade between themselves what each one of them produces the best. In the centralized exchange market, there is another person involved in the business, a *merchant*. The merchant is at the marketplace (a central area), and every person brings what they produced and trade for every needed good, this way the total number of transactions needed to achieve a certain volume of exchange is reduced.

The marketing principles that were previously explored can be applied to every sector, but when applying to the tourism sector there are some particularities that it is important to take into account.

The first particularity that is going to be explained is the service quality. The service quality is closely related to People since they are going to be involved in every step of the experience, especially in the tourism sector. So, the "*staff performance will be critical to customer satisfaction*" (Witt & Moutinho, p.512, 1995). According to the same authors (1995), it is extremely hard to control the quality of an employee's performance than the one of a machine specially in international operations like big hotel chains or airlines.

The tourism industry is one of the biggest service-based business sectors in the world, and with that comes also a lot of tradition and costumes. Therefore, it is important to know that tourism marketing has some particular characteristics such as: "1) *marketing is a philosophy with the overriding value that the decision-making process of any organization has to be led by the consumers' needs, the market-place and the company's assets and resources*; 2) *successful*

marketing requires a special organization structure that believes in integrating the principles of consumer orientation throughout the organization; 3) marketing requires innovative methods of thinking and planning so that new ideas are generated to take advantage of opportunities or to improve existing methods of marketing” (Cooper, Fletcher, Gilbert, Shepherd & Wanhill, p. 367, 1999).

In order to get through any issues with service quality, marketing exists to “*create a consistent image and differential advantage for a product so that customers are loyal to it and perhaps willing to pay more for it*” (Witt & Moutinho, 1995).

Another particularity, is the fluctuating demand/rigid supply. This problem can be interpreted as a usual marketing issue in all kinds of companies, where manufacturers make big investments with long leads times for an uncertain demand, but it can be aggravated on the demand side in the tourism sector.

On one hand, companies that operate in the tourism sector usually need to make big investments for example for accommodation or airports. This becomes an actual problem due to the vulnerability of the tourist market (because this is a seasonal market, demand fluctuates a lot). So, the marketing manager needs to be prepared to adjust the supply accordingly to the demand. As the holiday season comes to an end, this can take hotel chains and airlines to pricing wars, and as it is normal an enlightened customer opts to choose their holiday destination in the period where these pricing wars are happening. Pricing wars should be avoided at all costs because it has no effect for the image of the company and the customers that paid the full price might feel unhappy with the price drop that occurred weeks later.

The third particularity is the impact that tourism has on society. The marketing manager should take into consideration that the market he/she is operating in is a much more volatile market when it comes to changes in the environment. This is because if the environment is drastically changed then the product offering and the appeal that the destination has on tourists can be ruined. So, according to Witt & Moutinho (p. 513, 1995), marketing managers in the tourism sector “*must be heavily involved in planning/environmental aspects*”. The same researchers reached to the conclusion that “*the marketing in tourism may be much more about managing and redeploying demand rather than increasing it*” (p.513, 1995).

The fourth particularity that is present in the tourism market are the nonbusiness organizations. Nonbusiness tourism organizations are common in the public sector, where these companies are subsidized. These subsidized companies have a harder marketing task because they have to keep both their customers and the ones that subsidize the company happy.

The fifth and final particularity is related to the coordination of planning. This means that it is fundamental that different departments of a tourism company work together in order to achieve the objectives they set out to achieve by satisfying customers. Tourism companies like tour operators have to keep in mind that besides providing both accommodation and transportation in a single package, they have to work together with public authorities and other private operators in order to provide a nice smooth service to their customers.

Digital Marketing and Tourism

Digital marketing has been around for a while now, and a lot of authors have tried to define the term, for example Kannan and Li (p.23, 2017) defined digital marketing as “*an adaptive, technology-enabled process by which firms collaborate with customers and partners to jointly create, communicate, deliver, and sustain value for all stakeholders*”. Digital marketing “*combines factors - psychological factors, humanistic, anthropological, and technologist through the multimedia with large capacities and more interactive. The result is a new round of interaction between manufacturers, markets, and consumers, through the medium of technology (mobile) as the dominant element. Digital Marketing can simplify the process of marketing a product no longer hindered by obstacles such as distance, time and language. With the convenience offered by this too can make it easier for businesses to expand their business by utilizing Digital Marketing, through export activities*” (Aini & Hapsari, 2019).

According to Baltes (2015), the importance of digital marketing is increasing more and more each year, with many companies keen on increasing the use of the content marketing tool in their marketing policy, because on one hand, they are seeing the limitations of only having a traditional marketing communication strategy, and on the other hand, they are realizing the vast opportunities that came from digital marketing. Content marketing, according to Michael Brenner, “*is about delivering the content your audience is seeking in all the places they are searching for it. It is the effective combination of created, curated and syndicated content*” (Content Marketing Institute, 2015, cited in Baltes, p.112, 2015). If a company has a well-defined and structured strategy of content marketing, it will have the capacity to build powerful relationships with the intended market by building a positive brand image. Therefore, “*content marketers can attract, engage and retain audiences on a long term*” (Baltes, p.115, 2015).

So, the arrival of the Web 2.0 technologies has facilitated the creation and distribution of user-generated content. User-generated content (UGC) consists on “*media content created or produced by the general public rather than by paid professionals and primarily distributed on the Internet*” (Daugherty, Eastin & Bright, p.16, 2008), through multiple formats and can

give diversified information to consumers, such as opinions, evaluations, recommendations, instructions, facts and experiences.

Having this framework in mind is clear to understand that, UGC and word of mouth communication (WOM) achieve new relevance (Ferreira, Loureiro & Pereira, 2019). WOM consists on “*recommendations provided by friends, family members or even “like-minded souls”*” (Fernbacl & Thompson, 1995; Wang *et al.*, 2002; Bray, Schetzina, & Steinbrick, 2006; Yoo, Lee, Gretzel, & Fesenmaier, 2009, cited in Zeng & Gerritsen, 2014), but with the intensification of the use of the Internet and of social media platforms, this type of influence has also gone into the digital world creating the term *electronic word of mouth* (eWOM). eWOM is related with one topic already explored which is user generated content, in the sense that UGC is a form of eWOM. When we talk about eWOM, instead of being influenced by family or friends, people may be influenced by online ‘friends’ (Xiang & Gretzel, 2010). So, eWOM can be defined as “*any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet*” (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004, 39).

Like WOM, people when using eWOM give a certain level of credibility to the information depending on the communicator’s expertise and trustworthiness. eWOM may not always be a deliberate act, that is because of “*the scale of social media platforms and the persistence of previous activity by customers*” (Erkan & Evans, 2016; cited in Williams, Inversini, Ferdinand & Buhalis, 2017). This means that it can appear purposely or unintentionally. “*In both cases, eWOM hosted on social media can influence visitors’ actions and decision-making processes*” (Hudson & Thal, 2013; cited in Williams, Inversini, Ferdinand & Buhalis, 2017) each stage of tourism consumption. Destination eWOM is often seen as having a certain level of credibility due to the fact that sources may be considered (Dellarocas, 2005) and consequently more authentic than traditional media or destination promotions (Gretzel & Yoo, 2008). There is also the possibility that this strong credibility is marketed through bloggers and celebrities that receive a lot of attention (Hilligoss & Rieh, 2008). In addition, a “*receiver’s prior knowledge and involvement in the product/service are proved to have a moderating effect on the eWOM adoption*” (Doh & Hwang, 2009; Park & Kim, 2009, cited in Park, Shin, & Ju, 2019). These factors can boost the credibility of eWOM, improving its ability to stimulate tourism purchases (Inversini & Masiero, 2014). In fact, according to Li *et al.* (2020), the credibility of information sources weights heavy in travelers’ mind when thinking about travelling to particular destinations. One of the most crucial elements in online marketing in the tourism sector is trust because trust incentives consumers to purchase.

Therefore, according to Berhanu and Raj (2020), “*with the innovation of consumer-generated media that enable internet users to post any information easily without verifying, editing or fact-checking processes (triangulation), travellers should be cautious before they perceive the information and the media as trustworthy or credible*”.

Lamberton and Stephen (2016) studied the evolution of digital, social media, and mobile (DSMM) marketing and reached to the conclusion that this area of marketing has evolved from having into account DSMM in a “*static and utilitarian sense*” (Lamberton & Stephen, 2016), as a new mechanism that marketers and customers can exploit, to an approach where DSMM marketing has the power to change dramatically, where both marketers and costumers shape and are shaped by technology. DSMM has specially evolved in three main fields: 1) the influence of DSMM technologies on consumer self-expression and communication, 2) the use of DSMM technologies as decision support tools, and 3) the ways that DSMM technologies can be used as sources of market intelligence.

On the other hand, Kannan and Li (2017) identified key aspects affected by digital technologies and introduced a new research framework. This framework starts with an analysis of the environment having into consideration the five C’s – customers, collaborators, competitors, context, and company. Naturally, customers are the central focus of this environment analysis with the rest of the elements such as context, competitors and collaborators composing the environment the company works in.

Technology and Tourism

In 1993, Poon (1993; cited in Buhalis, 2020) forecast that, “*a whole system of ITs is being rapidly diffused throughout the tourism industry and no player will escape its impacts*”. As projected, several companies needed to change their strategic management and marketing, and reinvent business strategies to leverage from the encountered technological paradigm shifts (Buhalis, 2020).

According to Fotis *et al.* (2012), the tourism sector is regularly treated to be an information intense industry. Information search has always been an important part of the purchase decision process and was transformed as a result of the massified access to the Internet. Information and communication technologies (ICTs) most of the times diminish the notion of ambiguity and perceived risks but also increase the quality of trips (Fodness & Murray, 1997; cited in Navío-Marco *et al.*, 2018). According to Buhalis and Law (2008), “*a well-informed consumer is able to interact better with local resources and cultures, to find products and services that meet his/her requirements and to take advantage of special offers*

and reduced prices". Snepenger, Meged, Snelling and Worrall (1990; cited in Buhalis & Law, 2008) identified four main aspects that have a big impact when it comes to information search in the tourism context, which are "*i) the composition of vacation groups, ii) the presence of families and friends at the destination, iii) prior visits to the destination, and iv) the degree of novelty associated with the destination*". For that reason, it becomes urgent to fully comprehend how technology, along with online connectivity, has altered the distribution of information (Buhalis & Law, 2008) and the way people experience their travel (Neuhofer *et al.*, 2014).

It is notable that the tourism industry has been on a constant change since the first introduction of technologies that allowed consumers to make reservations online in late 1950s (Gössling & Lane, 2014), and particularly with the rise of popularity and usage of the Internet since late 1990s (Buhalis & Law, 2008; Law, Qi, & Buhalis, 2010; Aldebert, Dang, & Longhi, 2011, among others; cited in Navío-Marco *et al.*, 2018).

ICTs has a fundamental role in increasing the competitiveness of tourist organizations and destinations (Buhalis & O'Connor, 2005; Berne, Garcia- Gonzalez, & Mugica, 2012; cited in Navío-Marco *et al.*, 2018), as well as shaping the market itself. Due to digitalization, the barriers to entry the tourism industry are getting lower, making it easier for consumers to know the full price of every player before actually making the decision to purchase any service (price transparency), which will ultimately increase competition, "*transform distribution channels, optimizing costs and improving production efficiency*" (Assaf & Tsionas, 2018; Kim, Nam, & Stimpert, 2004; cited in Navío-Marco *et al.*, 2018). According to Abou-Shouk, Lim and Megicks (2013), the tourism industry has become the biggest type of products and services sold online (UNWTO, 2017). By 2017, the United Nations World Tourism Organization found out that over the 5 years prior to 2017, international tourism had been growing faster than the world goods trade and nowadays it is still among the predominates online commercial sectors.

The first introduction of technologies that allowed consumers to make reservations online was made by airlines in late 1950s and this technology helped managing in a better way reservation and improve aircraft seat use (Gössling & Lane, 2014). According to Emmer, Tauck, Wilkinson and Moore (1993), in the 1970s, a lot of travel agencies added reservation terminals in order to improve the management of reservations and aircraft seat use. At the end of the 1970s, a major change occurred with reservations terminals adding a feature that allowed to book accommodation, and it quickly replaced telephone-based hotel reservations, because booking accommodation on these terminals was "*instant, global and independent of time zones*" (Gössling & Lane, 2014). These terminal-based reservation systems were such a hit that "*by 1992, an estimated 96% of travel agencies in the USA, 85% in France, 61% in Scandinavia,*

53% in Spain and 23% in the UK were connected” (Emmer *et al.*, 1993; cited in Gössling & Lane, 2014).

Toh, Raven, and DeKay (2011), suggested that from the mid-1990s, terminal-based reservation systems that were previously exclusive to travel agencies have been swapped by independent Internet-based reservation systems, known as online travel agents, as long as a tourist has an Internet connection he can book flights and accommodation on his own (Amaro & Duarte, 2015; Escobar-Rodríguez & Carvajal-Trujillo, 2013; Kim, Lee, & Chung, 2013; Suki & Suki, 2017; Wang, Li, Li, & Zhang, 2016; cited in Navío-Marco, Ruiz-Gómez, & Sevilla-Sevilla, 2018). One of the main players in the online based reservation systems market is Booking.com, which describes itself as the “*world leader in booking accommodation online*” (Booking.com, 2013; cited in Gössling & Lane, 2014). Booking.com has been around since 1996, and nowadays offers accommodation in 43 languages, with more than 28 million registered accommodations plus 6.2 million houses, apartments or unique accommodations in more than 140,000 destinations across 228 countries (as of 17 December 2019). According to Booking.com, more than 1,500,000 room nights are reserved every day through its website, which attracts more than 400 million visits per month (Booking.com, 2019). Having into consideration all this data, it is easy to understand that Booking.com is the biggest Internet-based reservation system in the world (Gössling & Lane, 2014). Booking.com together with other online travel agencies compete against “*traditional*” reservation channels such as physical “*travel agencies, direct reservations made at the property, reservation systems established by countries or regions, as well as the large tour operators*” (Gössling & Lane, 2014). By 2013, Booking.com “*claimed to manage an estimated 145 million room night reservations per year (12 February 2013), while TUI Travel, “one of the world’s leading leisure travel companies”, takes “only” 20 million customers on holiday each year, also selling an annual 23 million room nights online*” (TUI Travel PLC, 2013; cited in Gössling & Lane, 2014).

According to Buhalis and Law (2008), promising tourists have become more autonomous and experienced on utilizing more mechanisms to set up their trips. Such mechanisms consist of “*reservation systems and online travel agencies (such as Expedia), search engines and meta-search engines (such as Google and Kayak, respectively), destination management systems (such as visitbritain.com), social networking and web 2.0 portals (such as TripAdvisor), price comparison sites (such as Kelkoo) as well as individual suppliers and intermediaries sites*” (Buhalis & Law, 2008). One key aspect in eTourism is pricing, because the majority of tourism companies communicate directly with their consumers regarding “*web-only fares and rates*” (Buhalis & Law, 2008), as well as giving them discounts due to saved

commissions and distribution charges that are present in a shorter value chain. Buhalis and Law (2008, p.661) stated that “*the key to success lies in the quick identification of consumer needs and in reaching potential clients with comprehensive, personalized and up-to-date products and services that satisfy those needs. Gradually new, experienced, sophisticated, and demanding travellers require interacting with suppliers to satisfy their own specific needs and wishes*”. Navío-Marco *et al.* (2018), are of the opinion that tourists are unique individuals, with their own personalized experiences, motivations and desires. The online world is constantly promoting “*the large-scale customization of tourist products*”, this is because it allows the tourism industry to identify significant market niches in different parts of the world. According to Sigala (2012), the most important driving forces of the new tourist services are the concepts of customer centricity, empowerment and involvement.

Nowadays eTourists can use digital tools to (Buhalis & Law, 2008; Buhalis, Leung, & Law, 2011; cited in Navío-Marco *et al.*, 2018):

- 1) Consult and gather needed information to set up their travel experience (Chung & Koo, 2015; Filieri & McLeay, 2014; cited in Navío-Marco *et al.*, 2018). This information goes from simple online searches to more in-depth price comparisons (Amaro & Duarte, 2015; cited in Navío-Marco *et al.*, 2018). The fact that it is getting easier to get tourism related information, it is shown as tourists nowadays can find and book online their destination, accommodation or private renting services. So, it is safe to conclude that this free and abundant information allows tourists to arrange their own tourism packs.
- 2) Manage the eTourism services previously bought, like booking a hotel, airline tickets and purchasing trips online (Amaro & Duarte, 2015; Escobar-Rodríguez & Carvajal-Trujillo, 2013; Kim, Lee, & Chung, 2013; Suki & Suki, 2017; Wang, Li, Li, & Zhang, 2016; cited in Navío-Marco *et al.*, 2018).
- 3) When at the destination, search for restaurants or other activities/services (Bai, 2015).
- 4) After the trip the eTourist can give recommendations to others (Kim, Qu, & Kim, 2009; Morrison, Jing, O'Leary, & Cai, 2001; cited in Navío-Marco *et al.*, 2018) or blogs (Chen, Shang, & Li, 2014; Ho & Lee, 2015; cited in Navío-Marco *et al.*, 2018).
- 5) Start an online business in the tourism sector, such as being an Airbnb Superhost (Ert, Fleischer, & Magen, 2016; Gunter, 2018; Liang, Schuckert, Law, & Chen, 2017; cited in Navío-Marco *et al.*, 2018) or using online tools and technologies that

are available within the tourism sector like using BlaBlaCar as a mean of transportation (Navío-Marco *et al.*, 2018).

The increasing amount of work on how ICTs influence travellers during their trip has most of the time been concentrated on how digital media, software, and devices can boost communication, gather information, co-create, and improve experiences (e.g. Buhalis & Amaranggana 2013; Buhalis & Foerste 2013, 2015; Wang & Fesenmaier 2013; Lamsfus *et al.* 2015; cited in Tanti & Buhalis, 2017). On the other hand, there is also relatively new research on the induced experiences and tensions resulting from disconnection or unplugging from technology (e.g. Pearce & Gretzel 2012; Paris *et al.* 2015; Germann Molz, & Paris, 2015; cited in Tanti & Buhalis, 2017).

The aggregation of information and online content formats the tourism experience in three different stages: pre-trip, during-trip, and post-trip (Hjalager & Jensen, 2012, cited in Tanti & Buhalis, 2017). The action that occurs before the trip (e.g. planning), during the trip (e.g. at destination) and after the trip (e.g. recollection) configures one's individual subjective evaluation and undergoing of a travel experience (Tung & Ritchie, 2011). During the planning process, tourists use information search to get ideas, search for alternatives, and help to avoid places that will not interest them (Xiang & Gretzel, 2010). As a result, online communities are progressively having greater and greater influence in the tourism sector because consumers are trusting more and more in other consumers and their past experiences, instead of trusting in marketing campaigns from companies within the sector (Munar & Jacobsen, 2014; cited in Navío-Marco *et al.*, 2018). According to Navío-Marco *et al.* (2018), "*there are two kinds of community websites: photo sharing sites (such as Flickr, Pinterest, Instagram) and review/opinion sites (such as Tripadvisor or hotels.com)*". By reading online reviews, travellers get a much better picture of what to expect, increase their confidence in decision making and reduce the risk of satisfaction disconfirmation (Xiang & Gretzel, 2010; Jun *et al.* 2012; cited in Navío-Marco *et al.*, 2018). But as a result of using review/opinion sites, researchers started to find answers for a few questions that have arisen such as the credibility and influence it has over the users (Ayeh, Au, & Law, 2013; Filieri, Alguezaui, & McLeay, 2015; cited in Navío-Marco *et al.*, 2018), their behavior patterns (Banerjee & Chua, 2016; cited in Navío-Marco *et al.*, 2018), the decision models below them (Zhang, Ji, Wang, & Chen, 2017; cited in Navío-Marco *et al.*, 2018), and the comment section with references to destinations (Kladou & Mavragani, 2015; cited in Navío-Marco *et al.*, 2018), hotels (Xie, Chen, & Wu, 2016; cited in Navío-Marco *et al.*, 2018), restaurants (Ganzaroli *et al.*, 2017; cited in Navío-Marco *et al.*, 2018) or museums (Carter, 2016; cited in Navío-Marco *et al.*, 2018). At the post-trip stage,

travellers communicate with each other, share experiences, help others and reassemble their memories of the trip using social media (Jun *et al.*, 2012, cited in Tanti & Buhalis, 2017; Wu & Pearce, 2014). When doing it, travellers start a mental imagery process that has the potential to alter their satisfaction level of previous trips (Jun *et al.* 2012; cited in Tanti & Buhalis, 2017).

One problem that arose with online communication is the fact that due to online communication travellers have a much harder time trying to disconnect themselves from their home and move into a much more rewarding, life-changing or challenging space (Pearce, 2012). This idea of movement between two distant worlds has been replaced with the idea of ‘digital elasticity’ (Pearce, 2012).

The idea of being connected to the world 100% of the time enhances the feeling of obligation for travellers to keep the same level of presence, attention, and intimacy with friends and relatives (Pearce & Gretzel, 2012; Germann Molz & Paris, 2015). Due to the excessive use of technology, tasks which were previously completed in the pre-trip and post-trip stages are now being completed during the consumption stage (Wang & Fesenmaier 2013; Wang *et al.* 2014). The pre-consumption stage has been shrinking as travellers tend to plan less and so they become less strict and more spontaneous (Tanti & Buhalis, 2017). Travellers are more open to change when an activity does not meet their standards and set up alternatives on the spot. Due to the fact that every experience is being shared live on social networks, the post-trip consumption is becoming less common to exist (Wang *et al.* 2014; Tussyadiah, 2014, cited in Tanti & Buhalis, 2017).

Nowadays, social media posts are embracing the idea of being considered the new form of postcards, so the response of other users to uploaded content can change the travel experience of the uploader. Travellers have a much more pleasant experience if they receive positive emotional support and encouragement on social media during their trip.

According to Wang *et al.* (2014) Neuhofer *et al.* (2014), the internet allows users to retrieve information, share experiences through content and communication and co-create experiences.

Everyday a lot of studies are published regarding the tourism sector. However, some of these studies are focusing on the differences between tourists from different generations. The four different generations are the Silent Generation, Baby Boomers, Generation X and Generation Y (Strauss & Howe, 1997; Pendergast, 2009; cited in Li, Li, & Hudson, 2013). According to the U.S. Travel Association (2011), in the Silent Generation are those that were born before 1945; those that were born between 1946 and 1964 are considered to be Baby

Boomers; everybody that was born from 1965 to 1980 are Generation Xers; and Generation Yers are the ones that were born from 1981 to 1990.

Throughout the years, researchers have used and validated the use of generational analysis in order to further comprehend generations' travel behavior. According to the Travel Industry Association (2006), the Silent Generation gravitates towards making longer trips when compared to the other generation groups, and is also the generation to be more prone to travel out of state and region. The study that Lehto, Jang, Achana, and O'Leary (2008; cited in Li, Li, & Hudson, 2013) executed showed that the Silent Generation prefers to visit casinos and to gamble, to live with everything life has to offer, including good food, good wine, being spoiled, they also prefer to travel in order to avoid winter in the US, and also to have direct contact with different cultures. According to Furr, Bonn, and Hausman's study (2012; cited in Li, Li, & Hudson, 2013), which covered information search and booking patterns among all generations of American travelers, the Silent generation was not as expected to utilize the Internet to search for information or to buy something than Baby Boomers and Generation X travelers. On the other hand, Baby Boomers are searching for unforgettable experiences rather than a holiday, they seek genuineness, spiritual and mental awareness, nostalgia, comfort and spontaneity packaged in sustainable wrapping and most important delivered with outstanding customer service. In addition, according to Lehto, Jang, Achana and O'Leary's study (2008; cited in Li, Li, & Hudson, 2013), Baby Boomers preferred spending quality time with family when on vacation, as well as romance and adventure. As a result of being present in 45% of households with children (New Strategist Publications, 2010; cited in Li, Li, & Hudson, 2013), Generation X is more likely to travel with children than the other generations (Travel Industry Association, 2006). According to Li *et al.* (2013), researchers have always considered Baby Boomers as being the "most lucrative travel market among the four generations due to their sheer size and their affluence". Regarding Generation Y, the literature highlights that currently they are the ones with the lowest household income and so naturally they are also the ones that spend the least on travel among all generations due to the fact that most of them are just starting their careers. With that in mind, it is also the conviction of the Travel Industry Association (2006) that this generation is going to be the next big consumer spending group, as well as the fact that they are much more active travelers than older generations. Like Baby Boomers, Generation Y also prefers travel experiences that have at its core authenticity and a rich cultural exchange with the possibility to experience cultural absorption (Xola Consulting, 2006; cited in Li, Li, & Hudson, 2013). Generation Y travelers normally stay in the place they are visiting during longer periods of time. They also tend to search for destinations and travel destinations that include

adventure in order to evolve as humans being and understand their personal or cultural ancestry. Xola Consulting (2006; cited in Li, Li, & Hudson, 2013) suggested that “*travel companies marketing to Generation Y should highlight trips that provide a more meaningful experience than traditional, packaged holidays*”. Lastly, the Travel Industry Association (2006) stated that seasonal travel is common in all generations, and while Generation X and Y are the most active ones, the Silent Generation and Baby Boomers tend to spend more when travelling. In addition, with the appearance of newer generations, like the millennials, disruptive changes can occur in the tourism industry, and as it is to expect there is still little research on this new generation. The millennials have the power to completely change the way the tourism business works because they are a generation that was born in the digital world, which means that they feel the need to always be connected with the rest of the world, and because they want to experience an authentic cultural immersion as well as practicing altruism.

As it was previously discussed, with the Internet gaining a bigger role on our life day by day, when it comes to information search regarding tourism, eWOM has become a hot topic for researchers (Filieri & McLeay, 2014; Sparks & Browning, 2011; cited in Navío-Marco *et al.*, 2018).

Thanks to Web 2.0 applications, people can communicate with each other as well as collaborate and influence other people in the way they travel (O’Connor 2008; Sigala, Christou, & Gretzel, 2012; cited in Filieri & McLeay, 2013). A few of these applications are enabling WOM online, communally known as eWOM (Bronner & de Hoog, 2011; cited in Filieri & McLeay, 2013). More specifically, in the travel industry “*online reviews can be considered as electronic versions of traditional WOM and consist of comments published by travelers on the tourism products, services, and brands they experience*” (Filieri & McLeay, 2013). Travelers give online reviews based on their own experience with the service or product and give their feedback to other travelers that are interested in having the same experience (Yoo & Gretzel, 2008; cited in Filieri & McLeay, 2013). A lot of websites nowadays allow consumers to give their opinion regarding all aspects of travelling, since accommodation, restaurants, destinations or even tour operators.

Another concept that has evolved from online reviews is information adoption, which was defined “*as the extent to which consumers modify their behavior by utilizing the suggestions made in ORs*” (Wu & Shaffer 1987; Sussman & Siegal 2003; Cheung, Lee, & Rabjohn 2008; cited in Filieri & McLeay, 2013). This means that after reading an online review, the traveler has the option to adopt the information shared through the online review in his/her decision-making process while planning a trip.

One practical example of a successful tourism-related online review site is Tripadvisor (www.tripadvisor.com), which consists on allowing travelers to express, in the form of a review, their opinions on accommodations or attractions around the world (Buhalis & Law, 2008). Between 2010 and 2013, traffic on Tripadvisor increased from 20 to 60 million monthly visitors (www.tripadvisor.com 2010, 2013; cited in Filieri & McLeay, 2013).

Previous studies found out that online reviews affect hotel rooms sales (Ye, Law, & Bin, 2009; Vermeulen & Seegers, 2009; Ye *et al.*, 2011; cited in Filieri & McLeay, 2013), and proposed that online reviews are considered much more credible than other sources of information (Gretzel & Yoo, 2008; Akehurst, 2009; Dickinger, 2011; Fotis, Buhalis, & Rossides, 2012; cited in Filieri & McLeay, 2013). These studies also proved that when an online review is positive that will translate into better attitudes towards hotels (Vermeulen & Seegers, 2009; cited in Filieri & McLeay, 2013) and into boosting consumers' confidence as well as minimizing risk as much as possible when booking accommodation (Gretzel, Yoo, & Purifoy, 2007; cited in Filieri & McLeay, 2013).

Following Navío-Marco *et al.* (2018) line of thinking, it is certain that current technology permits the personalization of the entire tourist experience, but it also has to make sure that automation does not change online and in-person exchanges. So, it is essential that the tourism industry inspires trust to all the potential travellers.

Information and Communications Technologies (ICTs), and specifically the Internet, have been one of the most important methods to increase tourism (Qi *et al.*, 2010; cited in Navío-Marco, 2018). Consumers trust the Internet to get information.

According to Navío-Marco *et al.* (2018), there are four main areas of research that link ICTs and tourism in the sphere of the consumer; they form a continuum between the digital tools or devices, and the tourist. The first one is regarding the technologies used and the devices that allow these technologies to work, which dives into the “*Internet (Xiang et al., 2015a,b; Standing, Tang-Taye, & Boyer, 2014; Garín-Muñoz & Pérez-Amaral, 2011), mobile phones and mobile technologies (Kim, Park, & Morrison, 2008; Kim, Chung, Lee, & Preis, 2015), social networks (Chung & Koo, 2015; Harrigan, Evers, Miles, & Daly, 2017), virtual and augmented reality (Kounavis, Kasimati, & Zamani, 2012) or geolocation (Rodríguez, 2015; Salazar, 2005)*” (Navío-Marco *et al.*, 2018). It is also important to highlight technologies such as Radio Frequency Identification (RFID) and Near Field Communication (NFC) that enable real-time connectivity in order to give new experiences to tourists (Kim & Kim, 2017; cited in Navío-Marco *et al.*, 2018). The second area of research focuses on technologies that are capable to process, analyze, share and exchange data (Gretzel, Koo, Sigala, & Xiang, 2015; cited in

Navío-Marco *et al.*, 2018). These technologies allow to understand communities, its characteristics, and unusual behaviors they might have (Bello-Orgaz, Jung, & Camacho, 2016; cited in Navío-Marco *et al.*, 2018). The third main area of attention is the synergy between the tool and the traveler, in this synergy it is important to have under consideration features such as “*complexity (Amaro & Duarte, 2015), novelty (Chen et al., 2014), navigability (Herrero & San Martín, 2012), informativity (Lai, 2015), enjoyment (Chung & Koo, 2015) and security as the main preoccupation already identified in Buhalis and Law (2008) and that continue to concern (Escobar-Rodríguez & Carvajal-Trujillo, 2014; Kim, Chung, & Lee, 2011)*” (Navío-Marco *et al.*, 2018). In short, the third main area has to do with the “*design and usability*” (Navío-Marco *et al.*, 2018) of the technology and whether it has a big influence on the tourist behavior. In addition, in different sectors and countries across the globe, a number of innovations, including artificial intelligence (AI), Robotics, Cashless Payments, artificial reality (AR) and virtual reality (VR), are now being utilized to different extents, propelling a series of dramatic improvements (Buhalis, 2020). Furthermore, machine learning is having a big impact in trying to offer the best experiences to potential consumers. Last but not least, the fourth main research area, according to Navío-Marco *et al.* (2018), has to do with the “*the consumer's profile, attitude and intentions (Agag & El-Masry, 2016) and behaviour (Amaro & Duarte, 2015)*”. This has to do with the potential traveler’s ability to welcome and deal with technology in their lives (Srivastava & Dhar, 2016; Ukpabi & Karjaluoto, 2017; cited in Navío-Marco *et al.*, 2018).

Buhalis (2019) came up with a new concept to which he called Ambient Intelligence (AmI) Tourism. It is powered by a variety of emerging technologies: “*the Internet of Things, the Internet of Everything, fifth generation mobile network (5G); Radio Frequency Identification (RFID); mobile devices, wearable smartphones and devises; 3D printing, apps along with APIs, Cryptocurrency and Blockchain, sensor and beacon networks, pervasive computing, gamification as well as enhanced analytical capabilities supported by Artificial Intelligence (AI) and machine learning (ML)*” (Tussyadiah *et al.*, 2018; Buhalis *et al.*, 2019). Buhalis (2019) defended that all these technologies were extremely important to create a smart digital grid that backed the interconnectivity of all stakeholders. He also stated that AmI provides tourism environments with knowledge and allows such habitats to be responsive, versatile and adaptable to stakeholder needs.

So, as it is easy to understand, ICTs are taking up a more relevant place by being more and more adopted in the tourism sector, with more relevant tourism-oriented data becoming available, and once this data has been carefully analyzed, it will have an impact on the business.

Social Media and Tourism

Social media can be defined as “*a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange or user-generated content*” (Kaplan & Haenlein, 2010). Social media is “*an effective marketing channel able to be wisely used integrated communications and marketing of tourism services*” (Sotiriadis & van Zyl, 2013, cited in Cazan & Cosma, 2018).

With the widespread use of social media, the experience that consumers have with the brands, either positive or negative, will have a big impact on the brand once they are shared throughout different social networking platforms. (Hamill, J., Tagg, S., Stevenson, A., & Vescovi, T, 2010).

It is clear to see that consumers buy products both for their benefits and to allocate the symbolic value attributed to these products (Levy, 1959; Belk, Bahn, and Mayer, 1982; cited in Grewal, Stephen, & Coleman, 2019). In other words, people every now and then buy and consume products because they identify themselves with the product (Bodner & Prelec 2003; Berger & Heath 2007; Dhar & Wertenbroch 2012; cited in Grewal, Stephen, & Coleman, 2019). Taking this into consideration, it is possible that by posting on social media products that can be relatable, people will identify themselves not only with the product but also with the brand, even if it is just virtually.

Social media allows consumers to share social information, so, one can assume that a pivotal reason on social media may be to share content that shows the individual’s identity. (Swann, 1983; Back *et al.* 2010; Reed *et al.* 2012; Toubia and Stephen, 2013; cited in Grewal, Stephen, & Coleman, 2019). In fact, according to Narangajavana *et al.* (2017), people use User-Generated Content and social media in order to search for information.

Tourism companies are starting to look more and more to the potential of social media and how to take advantage of the exposure they could get from it. With social media, tourists evolved into co-marketers, co-designers, co-producers and co-consumers of travel and tourism experiences (Sotiriadis & Zyl, 2013; cited in Icoz, Kutuk, & Icoz, 2018). Social media is now a major part of a company’s growth in the tourism sector (Ban *et al.*, 2015). One may say that tourism companies use social media in order to create interest “*in their properties, introduce promotions, draw the media attention, and creating awareness, recognition and promotion of their brands*” (Eroz & Dogdubay, 2012; cited in Icoz, Kutuk & Icoz, 2018). This means that thanks to the rise of social media, tourism companies have the opportunity to launch marketing campaigns that are targeted to a much larger audience than a standard marketing campaign.

Internet, specifically social media and websites of tourism service companies, also brought more convenience to tourists because they now can book flights, make hotel reservations and rent a car through it (Wheeler, 2009). This indicates that both tourism customers and tourism companies are susceptible to use social media (Icoz, Kutuk & Icoz, 2018).

Social Media/Technology and Tourist Decision Making

In 2003, Kotler *et al.* introduced a five-stage purchasing decision process when buying something. The five stages are “*need recognition, information search, evaluation, purchase decision and post-purchase decision*” (Kotler *et al.*, 2003). Having this model into consideration, the most important stage is information search (Icoz, Kutuk, & Icoz, 2018).

As a result of traveling and of being a product/service that asks for an intensive involvement from consumers, tourists are most likely going to spend a lot of time and effort researching information prior their travel (Fodness & Murry, 1997; Vogt & Fesenmaier, 1998; cited in Chen *et al.*, 2014). According to Fodness and Murry (1998; cited in Chen *et al.*, 2014) and Hyde (2008; cited in Chen *et al.*, 2014), travelers most of the times trust extrinsic information when deciding where to go and making decisions on the spot, like accommodation, transportation, attractions and shopping. Information search can be defined as “*an expressed need in response to internal and external contingencies to consult various amounts and types of information sources prior to a purchase decision to facilitate trip planning*” (Fodness & Murry, 1997; Hyde, 2008; cited in Chen *et al.*, 2014).

Previously, travelers could only find information regarding the tourism industry from commercial sources, and that was how they then would be able to form a destination image (Beerli & Martin, 2004; cited in Chen *et al.*, 2014). In addition, “*destinations with positive images have a higher probability of being included and chosen in the decision-making process*” (Echtner & Ritchie, 1991; Baloglu & McCleary, 1999; Bigné *et al.*, 2001; cited in Chen *et al.*, 2014). One can define destination image as “*a mental portrayal of the virtual experience, or what the experience might look like in a future trip*” (Govers, Go, & Kumar, 2007; cited in Chen *et al.*, 2014).

Also, in relation to information search, it can be used to reduce the notion of risk and ambiguity that are apart of some destinations (Money & Crotts, 2003; Beerli & Martin, 2004; cited in Chen *et al.*, 2014). Due to the fact that tourism is an experience product that is intangible and ambiguous, when purchasing and when experiencing it, there is higher risk implicated when choosing a destination (Chen *et al.*, 2014). Therefore, information search can drastically reduce the risk when making a purchase decision (Narangajavana *et al.*, 2017).

There is a significant amount of studies in the literature regarding the topic of how social media can impact consumer buying decisions. Kaplan and Haenlein's investigation reached to the conclusion that "*social media could be used as an opportunity in understanding the consumer decisions making process*" (Kaplan & Haenlein, 2010, cited in Icoz, Kutuk, & Icoz, 2018). The fact that there has been growth in the use of internet technologies, specially, through social media and social networking sites, it meant that the way tourism destinations promote their services and products has transformed completely (Tafveez, 2017). In 2011, Milano *et al.* studied the impact of social media on tourism websites. The main conclusion of the study was that the websites that had any connection to social media were more productive and competent in marketing its tourism business than standard marketing techniques.

As it was pointed out by Roque and Raposo (2016), social media has been over the years gaining more importance as an information source for travelers. Also, according to the study performed by Atadil (2011, cited in Icoz, Kutuk, & Icoz, 2018), travelers get the majority of information regarding hotels through social media and all of the information they are able to collect through social media has a pivotal role when selecting a hotel. In addition, Narangajavana *et al.* (2017) reached the conclusion that social media is one of the most important sources when it comes to search tourism related information. However, it is important to highlight that the literature indicates that social media is used the majority of times at the post trip phase in order to share experiences (Zivkovic *et al.*, 2014).

With that being said, Roque and Raposo (2016), referred the fact that travellers, due to the content that is posted daily concerning destinations and the tourism market as a whole on social media, can still be influenced to alter their holiday plans before the decision-making process is finished. Nowadays, tourism organizations have to take into consideration the fact that people relate more with content that is posted online, in social media networking sites or in travel websites that have huge a following, than the one made and shared on the traditional advertising platforms. Also, travelers view this type of content as being more trustworthy than information on websites of tourism organizations or travel agents (Fotis, Buhalis & Rossides, 2012). Zivkovic *et al.* (2014) made it clear that tourists are hugely influenced by social media and they rely on the information that they gather from it in order to being able to decide where to go.

Gros (2012), suggests that nowadays tourists want to deeply understand what they are buying and through the internet they can cross check information across multiple websites, where other people describe their own opinions as well as watching other travelers' YouTube videos. They, also, like to get directly involved in the purchase process.

Like Icoz, Kutuk and Icoz (2018), Nothi (2013, cited in Matikiti-Manyevere & Kruger, 2019) discovered that when it comes to making travel decisions, most of the times the most important element considered by tourists is information search. This is because when making this kind of decisions one does not have any physical experience with, and in order to battle this lack of experience one has to do a lot of research and information search. According to Jenkin (2010; cited in Matikiti-Manyevere & Kruger, 2019), when travelers want to visit notorious places, most of the information is gathered based on past experiences of family and friends, and when they want to visit more unique places the information is based on what they can find online so that they are able to make more responsible decisions.

One of the main travel social media networking sites is TripAdvisor, which allows for users to review and share their experiences and thoughts on destinations. With the help of websites like Trip Advisor tourists are able to make more responsible purchases and decide what is relevant and worth or not their time based on other people experiences (Miguens, Baggio & Costa, 2008; cited in Matikiti-Manyevere & Kruger, 2019). Besides TripAdvisor, Facebook is also being used to share tourists' experiences (Jadhav *et al.*, 2018). Facebook is getting more relevant when it comes to information search specially during and after the trip, as it has been shown by other studies (Kim & Fesenmaier, 2017). There are also some researchers that believe that Facebook can have a huge impact at pre-trip stages because it gives important information that can be used for planning and making final travel decisions (Lee *et al.*, 2012; Jadhav *et al.*, 2018; cited in Matikiti-Manyevere & Kruger, 2019).

Travelers also use social media during the trip in order to decide the kind of travel experience they want to have, such as what the type of transportation, food, accommodation and attractions they want to visit (Jadhav *et al.*, 2018). Shyle (2015) also reached the same conclusion as previous authors, such as Jenkin (2010; cited in Matikiti-Manyevere & Kruger, 2019), by pointing out that travelers usually trust their friends and family that have visited identical places to give them information regarding attractions and what activities they should do, and in order to have this interaction during the trip they use social media sites like Facebook to chat with their friends and family while traveling.

Tourists make use of social media after the trip is completed and they are back home. It is in this phase that tourists classify and assess their experiences in order to understand “*whether they are satisfied or not, and decide whether to drop some activities, products or the information sources used during travelling process*” (Dwityas & Briandana, 2017; cited in Matikiti-Manyevere & Kruger, 2019).

The way that tourists plan and execute their holiday trips and the way they travel has been immensely modified by social media sites (Sood, Kattiyapornpong & Miller, 2011; Gururain, 2015; cited in Matikiti-Manyevere & Kruger, 2019). Most studies “*show that social media have been widely embraced by travelers in order to search, organize, share, and declare their travel stories and experiences through blogs, online communities, media sharing sites, social bookmarking sites, social knowledge sharing sites, and other tools in a collaborative way*” (Hays *et al.*, 2013; cited in Icoz, Kutuk, & Icoz, 2018). Thanks to social media, people nowadays spend far less time searching for information regarding their holiday destination. So, one can say that social media has become a very persuasive source of information to tourists as they have fully changed “*how tourist search, collect and disseminate travel information and experiences*” (Matikiti-Manyevere & Kruger, 2019). Therefore, it is safe to say that social media is a valid and competent tool for marketing in the tourism sector and so it can be stated that the “*consumers’ decision-making process for online tourism purchase is directly linked to social media marketing*” (Icoz, Kutuk, & Icoz, p.1055, 2018).

Although social media has an enormous impact on decision makers when it comes to purchase an experience like travelling (Yoo & Gretzel, 2012; cited in Chen *et al.*, 2014), as Icoz, Kutuk and Icoz (2018) proved before, it is not the only way to use technology to search tourism related information. There are tons of blogs that have become an essential source to gain travel information (Scott, 2001; Lin & Huang, 2006; Litvin *et al.*, 2008; Singh, Veron-Jackson, & Cullinane, 2008; Yoo & Gretzel, 2012; cited in cited in Chen *et al.*, 2014). Through such blogs, tourists can share their experiences with other potential tourists. So, like social media, these types of personal blogs also allow for eWOM. It is from the understanding of Litvin *et al.* (2008) and Singh *et al.* (2008), that if companies use this kind of media, they would be creating a massive competitive advantage.

Consumer Behavior and Decision Making

Consumer behavior is by far one of the most studied topics when it comes to the marketing field applied to a wide range of sectors. According to Solomon (2013: 28), consumer behavior is “*the processes involved when individual select, purchase, use or dispose of products, services, or experiences to satisfy needs and wants*”. The author classified these needs and wants into two different categories: utilitarian and hedonic needs. It is crucial to understand these two different categories because they symbolize a continuing process that occurs before, during and after an acquisition.

When one looks to consumer behavior in general, it is crucial to have into consideration some crucial aspects, such as cultural and sub-cultural aspects, social status, comparative groups, family implications and human interaction. Besides those aspects, it is also essential to examine marketing stimuli and individual psychological influences, such as one's temperament and attitude, as well as one's ambitions, expectations and knowledge processing (Solomon, 2013; Schiffman & Wisenblit, 2015).

Considering the uniqueness of each consumer, it is fundamental that enterprises comprehend what are the needs and wants of all afflicted segments, in order to develop a much deeper segmentation strategy. In order to know what are these needs and wants, companies rely on criteria like demographics (e.g., age, family structure, social class), geographics (e.g., nationality) and psychographics (e.g., values, preferences and lifestyles) (Solomon, 2013; Schiffman & Wisenblit, 2015).

Companies need to know the decision-making process of potential customers in order to create a more effective marketing strategy. According to Schiffman and Wisenblit (2015), the decision-making model that is the most established has three phases: input, process and output (as shown in Figure 2.2). The "Input" phase includes three different types of extrinsic power, which are (1) the marketing mix, resides on strategies with the intent of reaching, informing, and persuading consumers to purchase the companies' products on a regular basis; (2) sociocultural influences, such as the customer's family, social class, reference groups, culture and, if that is the case, subculture; (3) communication sources, like advertising, social media and word-of-mouth, which is how the marketing mix and sociocultural influences are transmitted to consumers. The authors defended that the Process phase aims its attention on how decisions are made by customers. In this phase there are some variables that are crucial to understand such as need recognition, "*occurs when a consumer is faced with a "problem."*"; pre-purchase search, "*it begins when a consumer perceives a need that might be satisfied by the purchase and consumption of a product.*"; information search, and evaluation of alternatives. These variables are negotiated according to the consumers' psychological factors on the impacts from the input stage; it is also the phase when individuals learn from the evaluation. Finally, the "Output" phase refers to the "*purchase behaviors and post-purchase evaluation of the purchases*" (Schiffman & Wisenblit, 2015). Through this, knowledge is acquired by training and learning, which is also retained as memories over lengthy periods of time (Moore *et al.*, 2012).

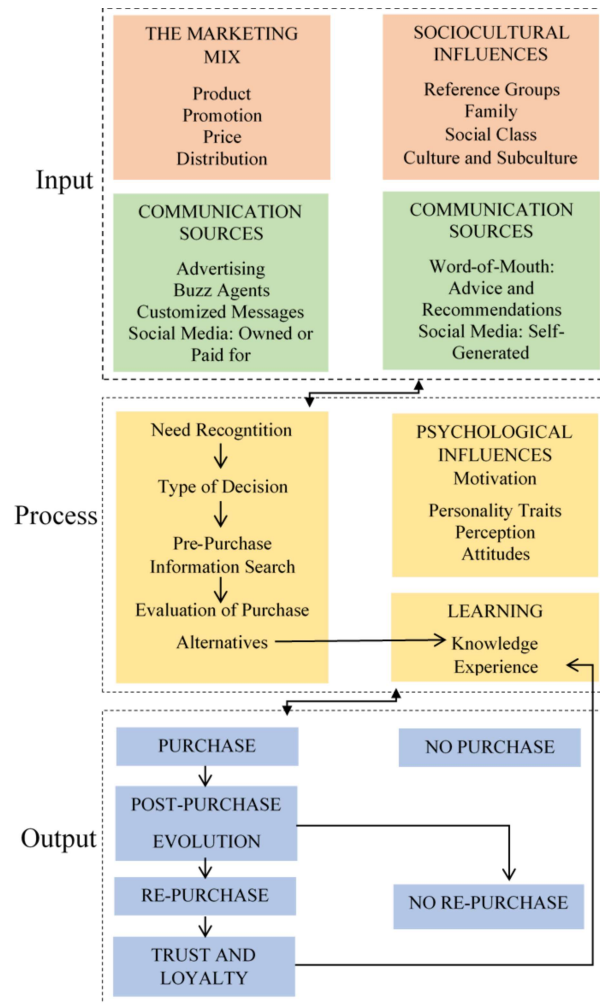


Figure 2.2: Consumer Decision-Making Model

Source: Schiffman & Wisenblit, 2015

When trying to understand the decision-making process, it is an advantage if we are able to first comprehend the effort that leads to every decision. According to Solomon (2013), it is necessary to think about this process “*in terms of a continuum, anchored on one end by habitual decision making and at the other extreme by extended problem solving*”. The decisions that are in the middle are called “*limited problem solving*” (Solomon, 2013). As seen in Figure 2.3, consumer involvement is influenced by person factors (needs, importance, interest, values), object or stimulus factors (differentiation of alternatives, source of communication, content of communication) and situational factors (purchase/use, occasion) (Solomon, 2013). Also, the level of involvement may be affected by more than one of them (Solomon, 2013). Figure 2.4 demonstrates that lower consumer involvement is associated with routine response behavior, this means regular consumption decisions (e.g.: toilet paper), while a higher consumer involvement is associated with extensive problem solving, this type

of involvement entails a much deeper cognitive and affective decision making (e.g.: buying a house) (Solomon, 2013).

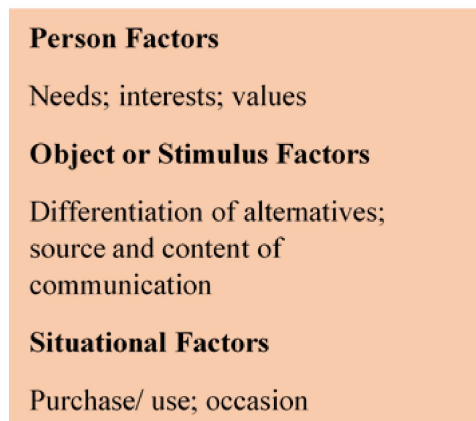


Figure 2.3 - Antecedents of Consumer Involvement

Source: Solomon, 2013

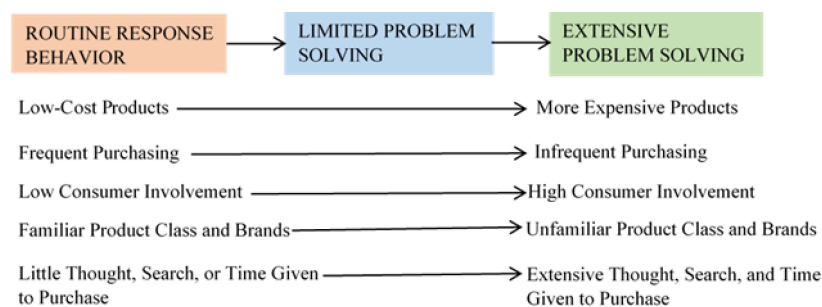


Figure 2.4: A Continuum of Buying Decision Behavior

Source: Solomon, 2013

With the evolution of the internet and social media, consumers can now interact whenever they want with companies from different parts of the globe. Besides this, consumers can also share their opinions, at any time and no matter where they are in the world, regarding a specific product/service they purchase, with others potential consumers (Solomon, 2013).

Consumer Behavior in Tourism

According to Moore *et al.* (2012), “*the management of tourism depends in part upon the successful management of tourist behaviors and experiences*”. Knowing the tourist behaviors and experiences is still a major difficulty for tourism researchers. D’Urso, Disegna and Massari (2016) stated that research regarding tourism consumer behavior has evolved into a more convoluted research, due to consumers starting to swiftly change and becoming more uncontrollable and demanding which leads to unpredictable behaviors. In order to fully

comprehend consumer behavior, it is critical to understand some of its main theoretical concepts regarding the tourism sector.

The first concept is decision-making. It is important to understand that the process of decision-making is not completely logical. As it was already mentioned, the purchasing decision process has five steps: 1) need recognition; 2) information search; 3) evaluation; 4) purchase decision; 5) post-purchase decision (Kotler *et al.*, 2003). This process is influenced by internal, interpersonal or non-interpersonal factors. The internal factors consist in attitudes, motivations and lifestyle. The interpersonal factors can be, for example, word-of-mouth and the non-interpersonal factors which can be described as marketing stimuli. All these factors interfere in the tourist decision because his/her decision-making process is more influenced by situational factors (Sirakaya & Woodside, 2005; Schiffman & Wisenblit, 2015).

Researchers proposed that the “normal” decision-making process is not applicable in all situations, such as when making a decision relating to travel (Morgan & Pritchard, 2012; Moore *et al.*, 2012). In fact, the five steps of the purchasing decision process is unable to differentiate tangible products from intangible products (e.g., services), because it presents the decision-making process as an uncomplicated “*input-output model*” (Smallman & Moore, 2010); nonetheless, the decision-making process of tourists is more sophisticated, because it incorporates planned and unplanned choices that are made when planning the travel and during the travel (Smallman & Moore, 2010; Choi *et al.*, 2012; Moore *et al.*, 2012), and at the same time the perceived risk and uncertainty are higher than in the “normal” decision-making process. Moreover, according to Smallman and Moore (2010), majority of the studies only cover a specific feature, such as the destination choice, when in fact, all the decisions made after choosing a destination are also crucial. That is why the “normal” decision-making process is limited and not suitable for effective marketing practices.

Researchers showed that travel decision-making is a changing and continuous process (Choi *et al.*, 2012; Martin & Woodside, 2012). Due to its “*intangibility, inseparability, heterogeneity and perishability*”, decisions when purchasing a service are different than when using the typical decision-making stages for tangible products (Morgan & Pritchard, 2012). Therefore, there are more sophisticated factors that play a crucial role in a travel decision making: 1) acknowledging a need to travel; 2) pre-trip planning (e.g., choosing a destination, booking the trip); 3) on-site experiences (e.g., planned/unplanned activities and appraisal); 4) post-trip evaluation and future intentions.

Moreover, the travel decision-making process is more complexed, because this type of purchase decision is considered as being uncertain and hence why it demands more planning

and problem solving and why it generally has a higher cost. Besides all this, tourists tend to be more involved and care more in this type of decision-making because, normally, they have a lack of knowledge and do not have experienced the service they are buying (Sirakaya & Woodside, 2005; Smallman & Moore, 2010; Martin & Woodside, 2012). It is important to highlight that when it comes to travel decision-making, this might be either an individual decision or a group decision (e.g. family) (Hsu *et al.*, 2006; Gardiner & Kwek, 2017).

Motivation is the second concept. Research regarding motivation has been on an urgent journey to try to explain how and why consumers behave and choose the way that they do. This journey has been accentuated since it is known that motivation is the first step to the decision-making process of a consumer (Rita, Brochado & Dimova, 2019). Like in most businesses, motivation also plays a fundamental role of consumer behavior in tourism (Woodside, 2017) because motivations enable the explanation of why tourists choose trips and look for travel experiences right in the first phase of destination planning.

Motivation can be defined as “*a disposition or a state of need that drives individuals toward types of action that are capable of satisfying those needs*” (Li & Cai, 2012: 475). According to Yoon and Uysal (2005, p. 46), motivation is the inclusion of “*psychological/biological needs and wants, including internal forces that arouse, direct and integrate a person’s behavior and activity*”. According to Schiffman and Wisenblit (2015), the two types of needs that exist are the physiological and the psychological needs, and both influence one’s buying behaviors. Solomon (2013) defended that motivations can be utilitarian and hedonic; both are crucial to make purchase decisions.

Over the years, the motivation behind travelling has been the subject of many studies (Cohen, Prayag, & Moital, 2014). Lee *et al.* (2002) suggested that travel motivation is linked with travelers’ behavior and the activities they choose to do in a particular destination. So, one can assume that motivation can be understood as the first step towards the research of tourism behavior and the realization of tourists’ travel choices (Kim, Jogaratnam, & Noh, 2006). It is also important to highlight the fact that if a manager knows what is the motivation behind a tourist’s visit, than it will be easier to develop comprehensive destination marketing strategies (Bieger & Laesser, 2002; cited in Rita, Brochado & Dimova, 2019) and, by result, it will also be easier to offer more diverse and more appropriate products and services (Zoltan & Masiero, 2012; cited in Rita, Brochado & Dimova, 2019).

According to Schiffman and Wisenblit (2015), the hierarchy of needs proposed by Maslow (1943), when it comes to motivation in general, is one of the most important theories in consumer behavior research. This hierarchy is a valuable tool to comprehend consumer

needs, it consists of a five-level ranking in order of importance from lower-level needs to higher-levels, which are physiological, safety, social, ego, and self-actualization needs. When talking about motivation in the tourism framework, motivation is a crucial part the changing behaviors of tourists (Li & Cai, 2012). In Gnoth's (1997) opinion, the hierarchy of needs created by Maslow is too broad to explain tourism particular motivations and decisions.

Dann (1977) suggests that individuals are motivated by external and internal forces. Due to its simplicity and the fact that it is easy to understand, the push and pull theory has been widely accepted by tourism researchers (Moshin & Alsawafi, 2011; cited in Rita, Brochado & Dimova, 2019). The push and pull theory dives into two main issues when it comes to tourist behavior, the first one is the 'why', which has to do with the inner inspiration of the traveler, and the second one is the 'where to', which has to do with incentives from the outside.

On one hand, push factors tend to incentive one to travel to places far from home, while pull factors tend to lead travelers to specific destinations (Prayag & Ryan, 2011). Having this in mind, Lee *et al.* (2002) suggested that push factors come first followed then by pull factors, because push factors are the ones that convince travellers to travel (Lee *et al.*, 2002). Push factors can be organized into seven different types, which are, "*escapism, status, healthiness, adventure, social interaction, rest and relaxation and family togetherness*" (Mohsin & Alsawafi, 2011; cited in Rita, Brochado & Dimova, 2019).

On the other hand, pull factors take into account all the perks of a destination that have a big impact when deciding where to go (Correia & Pimpao, 2008). According to Mohsin and Alsawafi (2011; cited in Rita, Brochado & Dimova, 2019), pull motivations are intrinsically connected to the attractiveness of destinations and integrate its external or tangible resources and a tourists' perceptions and expectations of the destinations. Some researchers like Hsieh, O'Leary, and Morrison (1992; cited in Rita, Brochado & Dimova, 2019) propose that if marketing planners track tourists' favorite activities within destinations, they will be able to design better packages and programs for tourists. As it is possible to understand the preferability of the activities will vary by demographics, like "*age, education, occupation and marital status*" (Hsieh *et al.*, 1992; cited in Rita, Brochado & Dimova, 2019), and by the kind of holidays preferred (Rao, Thomas, & Javalgi, 1992; cited in Rita, Brochado & Dimova, 2019).

Researchers defend that motivation has an immediate and meaningful impact on the affective image of a destination (Beerli & Martín, 2004; Li & Cai, 2012). That is why it is very important that tourism managers analyze consumer insights at the same time they recognize the attributes that should be highlighted and the features and resources that destinations could offer to meet their developed needs and expectations.

Information search is without any doubt a crucial part of the decision-making process because it allows consumers to get more knowledge about the product they are going to purchase and by doing that it also reduces the perceived risk and uncertainty (Sirakaya & Woodside, 2005; Choi *et al.*, 2012). It can be considered as an ever-changing and continuous process that happens both before and after making a purchase (Choi *et al.*, 2012). Something that deeply contributes to information search is the fact that, nowadays, consumers are willing to connect via word-of-mouth, particularly via electronic word-of-mouth (Luo & Zhong, 2015; Xiang *et al.*, 2015). Information search can be defined as “*an expressed need in response to internal and external contingencies to consult various amounts and types of information sources prior to a purchase decision to facilitate trip planning*” (Fodness & Murry, 1998; Hyde, 2008; cited in Chen *et al.*, 2014).

Normally, tourists decide their travel destination based on a set of information sources, the process of actively searching includes when, where to and how to search. According to Fodness and Murray (1998; cited in Chen *et al.*, 2014) and Hyde (2008; cited in Chen *et al.*, 2014) the searched information can be either extrinsic information (external sources) or intrinsic information (internal sources). On the one hand, external sources consist in advertisements and all promotional information that comes from marketers, but it also consists in information from neutral channels, such as news, books, word-of-mouth and movies.

On the other hand, one’s past experiences and information searches can be considered as internal sources (Fodness & Murray, 1999), this past activity forms one’s previous memory and knowledge. Previously, travelers could only find information regarding the tourism industry from commercial sources, and that was how they then would be able to form a destination image (Beerli & Martin, 2004; cited in Chen *et al.*, 2014). In addition, “*destinations with positive images have a higher probability of being included and chosen in the decision-making process*” (Echtner & Ritchie, 1991; Baloglu & McCleary, 1999; Bigné *et al.*, 2001; cited in Chen *et al.*, 2014). Destination image can be defined as “*a mental portrayal of the virtual experience, or what the experience might look like in a future trip*” (Govers, Go, & Kumar, 2007; cited in Chen *et al.*, 2014).

Ye *et al.* (2011), defended that consumers are more willing to receive information from the groups they are part of. In order to do so, one of the most influential sources, is word-of-mouth, due to its high credibility because the product or service have already been experienced and also because the interpersonal connection with family members and friends is much stronger and it generally results in a relationship based on trust (Bieger & Laesser, 2004; Luo & Zhong, 2015).

Besides all this, the revolution of the digital world has been one of the most crucial factors influencing consumer behavior (Ye *et al.*, 2011; Munar & Jacobsen, 2012; Xiang, *et al.*, 2015). Specifically, in the tourism sector, the Internet allows for information to flow between consumers themselves, consumers and tourism companies and consumers and destination marketing organizations (Xiang & Gretzel, 2010).

Further than that, social media platforms have given rise to a worldwide increase in destination marketing as they become an everyday need for travelers (Luo & Zhong, 2015). Due to the rise in popularity of social media when it comes to consumer generated content, where tourists post photos, videos and text sharing their experiences with a digital community of people with similar interests, the traditional travel intermediaries are being put in question because tourists and consumers in general, nowadays, depend on the internet to search for information (Xiang & Gretzel, 2010; Ye *et al.*, 2011; Luo & Zhong, 2015; Xiang *et al.*, 2015).

The fact that tourism products are experiential products makes it harder for consumers to experience it in advance or to know in advance what is the quality of the tourism product (Ye *et al.*, 2011; Luo & Zhong, 2015). Tourists after having decided to do a trip, they will be much more engaged and involved when searching for information in order to minimize the perception of risk and uncertainty (Smallman & Moore, 2010; Martin & Woodside, 2012). Research shows that people considering to travel are more likely to acknowledge online reviews as being a much better method to fulfill their doubts than information offered through “normal” media or tourism companies (Ye *et al.*, 2011; Filieri, Alguezaui & Mcleay, 2015; Xiang *et al.*, 2015). Choi *et al.* (2012) found out that after the destination is chosen, and the purchase is done, the information searched in the post-purchase phase is much more accurate and specific to that particular destination, such as the future weather, food choices, recreation activities and events. This post-purchase information search stage is done during the usual time lag between purchasing the product and consuming the product.

Perception is one of the most important ideas when the matter is consumer behavior. It consists in “*how individuals select, organize and interpret the stimuli in a meaningful and coherent way*” (Schiffman & Wisenblit, 2015: 114). In other words, perception might be understood as how one sees the products or services. One’s perception of a product or service is, usually, formed through one’s 5 senses: seeing, listening, smelling, tasting and touching (Solomon, 2013). It is important to realize that although different people might be exposed to the same stimuli, that does not mean that their perception regarding the product or service is the same. Their perception might be different because besides the 5 senses, individual’s expectations and past experiences also come in play when forming a perception. That is why

perception is something extremely personal and individual (Beerli & Martín, 2004; Li & Cai, 2012).

The perception of a traveler towards a destination, is a continuous process that occurs before the travel, while travelling and after the travel (Cohen *et al.*, 2014) because a destination is an experiential product (Luo & Zhong, 2015). Within the tourism context, perception is extremely important in tourists' involvement, satisfaction, destination image and service quality (Cohen *et al.*, 2014).

Within the realm of tourism consumer perception, destination image is by far one of the hottest researched issues between researchers. In fact, destination image has the power to influence the destination choice, the experience when in the destination as well as the intentions after the trip (Bigné *et al.*, 2001; Chen & Tsai, 2007; Chi & Qu, 2008; Stylos *et al.*, 2016). Another important issue is the perceived service quality. In fact, the satisfaction of tourism consumers is extremely related with the difference between the expected quality and the experienced one (Chi & Qu, 2008; Chen & Chen, 2010). Like it was already mentioned, this image is subject to a constant change because a destination is an experiential product, therefore is always dependent on external influences, that is why the image that a tourist has after the trip is the most accurate and realistic one (Beerli & Martín, 2004; Stylos *et al.*, 2016).

Future behavioral intentions involve a future planned action that symbolizes the chance of the same types of behaviors to be repeated (Chen & Tsai, 2007). When looking for future behavioral intentions within the tourism sector, some of the positive behaviors that can come out after the tourist has been in a destination are: (1) going back to the same location, (2) recommending the destination to other potential tourists, and (3) saying good things about the destination (Castro, Armario & Ruiz, 2007; Chen & Tsai, 2007).

Chen and Tsai (2007) proposed that the enthusiasm to go back to a destination is influenced by the level of satisfaction, the perceived value, and past behavior.

Furthermore, researchers suggested that tourists are more willing to recommend a destination if the image that they have of that destination is a positive one (Bigné *et al.*, 2001; Papadimitriou *et al.*, 2015).

Table 2.1: Main theoretical concepts in the tourism sector

| | Tourism Consumer behavior | Normal Consumer behavior |
|---------------------------|---|--|
| Decision-making | <ol style="list-style-type: none"> 1. The decision-making process of tourists is more sophisticated; the perceived risk and uncertainty are higher (Smallman & Moore, 2010; Choi <i>et al.</i>, 2012; Moore <i>et al.</i>, 2012) 2. Travel decision-making is a changing and continuous process (Choi <i>et al.</i>, 2012; Martin & Woodside, 2012) | <ol style="list-style-type: none"> 1. “Normal” decision-making process is limited for effective marketing practices (Smallman & Moore, 2010) |
| Motivation | <ol style="list-style-type: none"> 1. Motivation enables the explanation of why tourists choose trips and look for travel experiences right in the first phase of destination planning (Woodside, 2017) 2. Travel motivation is linked with traveler’s behavior and activities they choose to do in a particular destination (Lee <i>et al.</i>, 2002) 3. The hierarchy of needs created by Maslow is too broad to explain tourism specific motivations and decisions (Gnoth, 1997) 4. The Push and Pull theory have been widely accepted by tourism researchers. Push: The “why”, it has to do with the inner inspiration of the traveler. Pull: the “where to”, which has to do with incentives from the outside. | <ol style="list-style-type: none"> 1. Motivation is the first step to the decision-making process of a consumer (Rita, Brochado & Dimova, 2019) 2. Five-level ranking in order of importance from lower-level needs to higher-level needs: physiological, safety, social, ego, and self-actualization (Maslow, 1943) |
| Information Search | <ol style="list-style-type: none"> 1. The internet allows for information to flow between consumers themselves, consumers | <ol style="list-style-type: none"> 1. Allows consumers to get more knowledge about the product they are going to purchase and so it also |

| | | |
|-----------------------------------|--|--|
| | <p>and tourism companies, consumer and destination marketing organizations (Xiang & Gretzel, 2010)</p> <ol style="list-style-type: none"> 2. The fact that tourism products are experiential products makes it harder for consumers to experience it in advance the quality of the tourism product (Ye et al., 2011; Luo & Zhong, 2015) 3. People considering to travel are more likely to acknowledge online reviews as being a much better method to fulfill their doubts than information offered through “normal” media or tourism companies (Ye et al., 2011; Filieri, Algezauai & Mcleay, 2015; Xiang et al., 2015). | <p>reduces the perceived risk and uncertainty (Sirakaya & Woodside, 2005; Choi <i>et al.</i>, 2012)</p> <ol style="list-style-type: none"> 2. The searched information can be extrinsic or intrinsic information. Extrinsic information: advertisements, and all promotion information, news, books, word of mouth, and movies. Intrinsic information: one’s previous memory and knowledge. |
| Perception | <ol style="list-style-type: none"> 1. The perception of a traveler towards a destination is a continuous process that occurs before the travel, while travelling and after the travel (Cohen <i>et al.</i>, 2014) 2. Destination image has the power to influence the destination choice, the experience when in the destination as well as the intentions after the trip (Bigné <i>et al.</i>, 2001; Chen & Tsai, 2007; Chi & Qu, 2008; Stylos <i>et al.</i>, 2016) | <ol style="list-style-type: none"> 1. “<i>How individuals select, organize and interpret the stimuli in a meaningful and coherent way</i>” (Schiffman & Wisenblit, 2015) 2. One’s perception is formed through their 5 senses: seeing, listening, smelling, tasting, and touching (Solomon, 2013) |
| Future behavior intentions | <ol style="list-style-type: none"> 1. Some of the positive behaviors that can come out after the tourist has been in a destination are: (1) going back to the same location, (2) recommending the destination to other potential tourists, and (3) | <ol style="list-style-type: none"> 1. Future behavioral intentions involve a future planned action that symbolizes the chance of the same types of behaviors to be repeated (Chen & Tsai, 2007) |

| | | |
|--|---|--|
| | saying good things about the destination (Castro, Armario & Ruiz, 2007; Chen & Tsai, 2007). | |
|--|---|--|

Source: Own Elaboration

Platforms in focus in this research

The focus of this thesis is going to fall into two of the most mainstream social media platforms, YouTube and Instagram, as well as online tourism review websites, such as Booking.com and TripAdvisor.

YouTube consists in an online video sharing platform (Snelson, 2011) and, is also seen as a social networking site besides being currently one of the most popular social media platforms there are (Pikas & Sorrentino, 2014). YouTube has changed when it comes to the original idea of being the distributor for amateur videos to now being also the distributor of companies' promotional videos. The year of 2013 was when they started their commercialization process more seriously with the launching of a paid subscriptions program for some popular channels (Jakopovic, 2020). So, a portion of the video content in some channels can only be watched for a monthly or annual fee. YouTube has become very attractive to a lot of businesses because it has over 1.9 billion logged-in users per month (www.youtube.com, 2019) and a relatively low cost of entry, because you only need a camera to make YouTube videos. Therefore, if a company is able to reach a small portion of the 1 billion hours of content consumed every day on YouTube (www.youtube.com, 2019), it would most likely make a lot of money out of the advertisements/videos.

YouTube has become so popular that even traditional media post segments of news or TV shows on the website. *“Media convergence comes about because people use YouTube as a stepping-stone to mainstream media, and mainstream media use YouTube to promote their programs, especially in ‘webisode’ format, a 3–5-minute episodes of TV shows for web showing only.”* (Kim, 2012, pp. 54-55).

Nowadays, YouTube's mission and focus *“is to give everyone a voice and show them the world. We believe that everyone deserves to have a voice and that the world is a better place when we listen, share and build a community through our stories.”* (www.youtube.com, 2019)

The second social media platform that this thesis is going to focus on is in Instagram. Instagram is *“a mobile-phone application in which users post photographs with captions”*

(Smith, 2018) and according to Fatanti and Suyadnya (2015), at first was an online photography sharing platform, but it evolved into a platform where "*advertising, promotion, marketing, distribution ideas/goods and providing information services fast, precise and accurately*" (Hoffman & Novak, 1996; Sweeney, 2000; Doolin *et al.*, 2002; cited in Fatanti & Suyadnya, 2015) is welcomed. Instagram is one of the world's most popular and fastest-growing social-media platforms, growing at a 5% rate per quarter, while some of its main competitors like Snapchat or Facebook are growing at a 2,13% and 3,14% rate per quarter. That is how Instagram manage to reach, as of September 2017, 800 million users worldwide, with 500 million of those users open the application on a daily basis (Smith, 2018) and more recently to reach 1 billion active users per month in June 2018 (Instagram, 2018).

Besides the possibility of staying in touch with friends, and look at fashion and food inspiration a big part of Instagram's interest is in its usability as a travel guide. According to a 2016 Forbes report (cited in Smith, 2018), "*71 per cent of users aged 18–30 report using the application while on the road, while two 2017 studies both found that around half of their survey respondents described Instagram as a source of inspiration for their trip*".

Nowadays, tourism is being dealt through social media on a regular basis. This becomes even more evident when more than 20 per cent of all international travellers admit that social media is one of the main sources of information they use (Wang & Alasuutari, 2017; cited in Smith, 2018), and according to Narangajavana *et al.* (2017; cited in Smith, 2018), a "*recent study found that social media strongly impacts tourists' expectations of a destination*". According to Lauren Bath, a marketer and an Instagram user with over 465,000 followers, Instagram is becoming an essential part in the pre-travel 'dreaming phase'. Also, Fatanti and Suyadnya (2015) defended that, "*Instagram provide the opportunities for many audiences to take a part as promotion agent of tourism destination*". So, with the rising popularity of Instagram, it becomes clear that brands should take advantage of the attention this social networking platform is getting.

The other platforms that the research in this thesis is going to focus on are more directly linked with tourism and with the tourism industry. These platforms are online tourism review sites, such as Booking.com and TripAdvisor, which were already previously discussed.

Chapter 3: Methodology

This research required the application of a deductive approach because the first step implemented was to find out all the secondary data necessary and in order to do that it was done an extensive analysis of the current theoretical concepts regarding the topic of this thesis. These concepts were then the starting point for the research questions and objectives defined (Yin, 2003; cited in Saunders, Lewis & Thornhill, 2009).

After doing an extensive analysis of the most pressing concepts, a quantitative methodology was applied, in order to better understand the influence that technology has on the decision-making process of a tourism destination. This methodology consists on analyzing the quantifiable data collected through statistical techniques (Creswell, 2002; cited in Ragab & Arisha, 2018). This kind of methodology is normally used to examine relationships between variables that produce outcomes of a predictive, explanatory, or confirmatory nature (Williams, 2011; cited in Ragab & Arisha, 2018).

It was decided that in order to get all the primary data required, which will be quantitative data and will fall under the descriptive research design more specifically the cross-sectional design, a survey was elaborated, in this case in the form of a questionnaire, so that it was possible to understand whether people are influenced by modern technology when choosing a tourism destination. According to Veal (2011) a survey is “*the process of designing and conducting a study involving the gathering of information from a number of subjects*” (p.256). A questionnaire, according to Durbarry (2018), consists in a methodical list of questions that are arranged with the objective of collecting data and information. It is normally referred as a tool to compile data, that usually is composed of open and/or closed questions. A questionnaire can also be done online and in this case, it is referred as e-questionnaire.

Hania Janta (2018, in Durbarry, 2018), defended that online surveys are easy to implement because they can be posted on social networking sites and users of those networking sites can easily answer the online survey on their smartphone, tablet or personal computer. Denscombe (2007; cited in Durbarry, 2018) affirmed that there are three different types of online surveys: (1) email survey, (2) questionnaire sent as an attachment, and (3) web-based questionnaire. In this case, it was opted to implement a web-based questionnaire, which was posted on multiple social networking sites through a direct link of the questionnaire. This link was accompanied by a small text explaining the purpose of the survey and the main criteria in order to be fitted to answer this survey which is to have at least 16 years old and to have travelled before.

Some of the main advantages of online surveys are the fact that most researchers find them cheaper, quicker and easier to implement when compared to other methods such as face-to-face surveys or telephone surveys (Schonlau *et al.*, 2002; Denscombe, 2007; Sue & Ritter, 2012; cited in Durbarry, 2018). Another advantage is the fact that the results can be immediately exported to SPSS or to Microsoft Excel, this is going to improve the veracity of the data. Lastly, when someone is responding the survey they can choose when to start, to stop whenever they want and to finish when they want.

However, like every method, online surveys also have disadvantages. According to Sue and Ritter (2012, cited in Durbarry, 2018), some of the disadvantages are “*coverage bias, lack of knowledge of who is responding to the questions and reliance of software*”. Another limitation is “*self-selection bias and non-response bias*” (Hewson, 2002; Wright, 2005; cited in Durbarry, 2018).

In order to minimize some of the disadvantages, this online survey was targeted to people with previous experiences of outbound travel, because these are the ones to have a more precise idea of their own attitudes and future behaviours.

Scope and Objectives of the Investigation

This survey aimed to characterize the impact of technology on the decision-making process of a tourism destination. In this sense, its conclusions are placed at four levels: 1. Understanding where tourists search for information; 2. Understanding what is the most searched kind of information when deciding a destination; 3. Which mobile technology tourists use the most when traveling.; 4. Which variable influences the most one’s perception of a tourism destination.

Data Collection

As it was already explained, an online survey was applied. Having into account the fact that the population for this online survey consists in anybody that has already travelled at least one time and is over 16 years old, the sample size will be 385. In order to know what should be the correct sample size, the following formula, present on Durbarry (2018), was followed: Required Sample Size = $(Z - score)^2 \times Std Dev \times \frac{(1-StdDev)}{(margin\ of\ error)^2}$. The Z-score for 95% confidence was 1.96 and the standard deviation applied was 0.5.

The sample method used to reach the 385 people was the snowball sampling method. This method consists in identifying one member of the target population, and the other members

are identified by this member who then identifies other members creating a snowball effect in the number of members of the target population.

Conceptual Framework

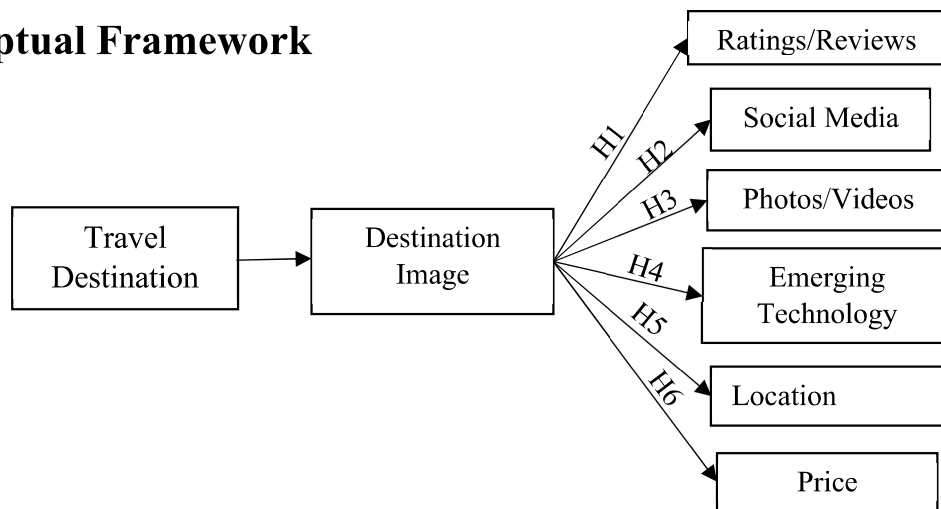


Figure 3.1: Conceptual Framework
Source: Own Elaboration

Hypothesis

Based on the literature review already done and having into account the sample size and the objectives of this thesis, the following hypothesis were formulated. Also, it is important to note that these hypotheses are going to be subject of additional analysis, in order to understand whether they can be supported or not.

Tourists usually determine their destinations relying on a collection of information sources. As it was previously shown, one of the early stages of the decision-making process when choosing a tourism destination is the creation of a destination image. At first, travelers could only find information regarding the tourism sector from commercial sources, so they can better shape the perception they had of a destination (Beerli & Martin, 2004; cited in Chen *et al.*, 2014). Nowadays, the revolution of the digital world has been one of the most crucial factors influencing consumer behavior (Ye *et al.*, 2011; Munar & Jacobsen, 2012; Xiang, *et al.*, 2015), which means that, in the tourism sector, the Internet allows for information to flow between consumers themselves, consumers and tourism companies and consumers and destination marketing organizations (Xiang & Gretzel, 2010). This raises the question if modern technology has the power to influence the creation of destination image, or in other words, the perception someone has about a destination.

The first natural step would be to see whether destination image has the power to influence the destination choice. However, researchers already found out that in fact destination

image does influence the destination choice, the experience when in the destination as well as the intentions one might have after the trip (Bigné *et al.*, 2001; Chen & Tsai, 2007; Chi & Qu, 2008; Stylos *et al.*, 2016). For that reason, there is no need to prove it one more time.

H1: Tourists acknowledge that online reviews and ratings influence the perception one has of a destination when deciding where to travel.

Therefore, it becomes crucial to try understand what kind of technology influences one's perception of a destination when deciding a travel destination. The major way researchers proved tourists used technology when searching for information was through eWOM, particularly through online reviews and ratings. Research reveals that travelers are more likely to accept online reviews as a far safer way to alleviate their concerns than knowledge received by "standard" media or tourism companies (Ye *et al.*, 2011; Filieri, Alguezaui & Mcleay, 2015; Xiang *et al.*, 2015). By reading online reviews, travelers get a much better understanding of what to expect, improve their optimism in decision-making and reduce the chance of crippling satisfaction (Xiang & Gretzel, 2010; Jun *et al.* 2012; cited in Navío-Marco *et al.*, 2018). Therefore, it is interesting to understand whether online reviews and ratings contribute for the perception that a tourist has regarding a destination and as a result if those online reviews and ratings influence their decision-making process.

H2: Tourists acknowledge that social media influence the perception one has of a destination when deciding where to travel.

Another major technological advancement that impacted the tourism sector was social media. There is a significant amount of studies in the literature regarding the topic of how social media can impact consumer buying decisions. In fact, researchers found out that “*social media could be used as an opportunity in understanding the consumer decisions making process*” (Kaplan & Haenlein, 2010, cited in Icoz, Kutuk, & Icoz, 2018). With the growth of social media's popularity and usage, tourism destinations had to adapt and promote their services and products using this tool (Tafveez, 2017). In 2011, Milano *et al.* found that the websites that had any connection to social media were more productive and competent in marketing its tourism business than standard marketing techniques. However, it is important to highlight that the literature indicates that social media is used the majority of times at the post trip phase in order to share experiences (Zivkovic *et al.*, 2014). Therefore, it becomes relevant to study and understand whether social media has any impact on the perception one has during the decision-making process of choosing a destination.

H3: Tourists acknowledge that photos/videos influence the perception one has of a destination when deciding where to travel.

Navío *et al.* (2018) identified that “*there are two kinds of community websites: photo sharing sites (such as Flickr, Pinterest, Instagram) and review/opinion sites (such as Tripadvisor or hotels.com)*”. As it was already discussed the review/opinion sites, it is time to understand whether or not online photo-related social networks influence the tourist when choosing the destination. It is important to highlight that this thesis is focusing more on Instagram when it comes to the photos because Instagram is “*a mobile-phone application in which users post photographs with captions*” (Smith, 2018) and also because although at first it was an online photography sharing platform (Fatanti & Suyadnya, 2015), it evolved into a platform where we can find companies and individuals “*advertising, promotion, marketing, distribution ideas/goods and providing information services fast, precise and accurately*” (Hoffman & Novak, 1996; Sweeney, 2000; Doolin *et al.*, 2002; cited in Fatanti & Suyadnya, 2015). When it comes to video, this thesis focuses more on YouTube because it consists in an online video sharing platform (Snelson, 2011) and because YouTube has changed from being the distributor of amateur videos to now being also the distributor of companies’ promotional videos.

H4: Tourists acknowledge that emerging technologies influence the perception one has of a destination when deciding where to travel.

Nowadays, technology evolves at a rapid pace, hence why Buhalis (2019) came up with a new concept to which he called Ambient Intelligence (AmI) Tourism. It consists on a variety of emerging technologies: “*the Internet of Things, the Internet of Everything, fifth generation mobile network (5G); Radio Frequency Identification (RFID); mobile devices, wearable smartphones and devises; 3D printing, apps along with APIs, Cryptocurrency and Blockchain, sensor and beacon networks, pervasive computing, gamification as well as enhanced analytical capabilities supported by Artificial Intelligence (AI) and machine learning (ML)*” (Tussyadiah *et al.*, 2018; Buhalis *et al.*, 2019). Buhalis (2019) defended that all these technologies were extremely important to create a smart digital grid that backed the interconnectivity of all stakeholders. He also stated that AmI provides tourism environments with knowledge and allows such habitats to be responsive, versatile and adaptable to stakeholder needs. So, it is clear that more and more these new emerging technologies have an impact on how tourists travel. That is why is it interesting to see if emerging technologies already influence and impact one’s perception of a destination.

H5: The localization of the destination influences the decision-making process of tourists when it comes to choosing a destination.

Another major attribute of a travel destination is its location. As Cooper *et al.* (p. 103, 1999) stated, tourists need to acknowledge a destination as being attractive and worth the visit with all of what entails visiting another place (money and time). People have been visiting other places due to its uniqueness; therefore, it is fundamental to understand if the localization of the destination influences the decision-making process of tourists when it comes to choosing a destination.

H6: The pricing offered online influences the decision-making process of tourists when it comes to choosing a destination.

Last but not least, one key factor of tourism, in general, is pricing. Thanks to the internet and to technology, nowadays, the majority of tourism companies communicate directly with their consumers when it comes to “*web-only fares and rates*” (Buhalis & Law, 2008), as well as giving them discounts due to saved commissions and distribution charges that are present in a shorter value chain. So, it becomes interesting to understand if the pricing offered online influences tourists to opt for a destination instead of other.

Table 3.1: Summary of the Hypothesis being analyzed

| Hypothesis | | Authors |
|---|--|---|
| H1: Tourists acknowledge that online reviews and ratings influence the perception one has of a destination when deciding where to travel. | <ol style="list-style-type: none"> 1. Research reveals that travelers are more likely to accept online reviews as a far safer way to alleviate their concerns than knowledge received by "standard" media or tourism companies. 2. By reading online reviews, travelers get a much better understanding of what to expect, improve their optimism in decision-making and reduce the chance of crippling satisfaction | <ol style="list-style-type: none"> 1. Ye <i>et al.</i>, 2011; Filieri, Alguezaui & Mcleay, 2015; Xiang <i>et al.</i>, 2015 2. Xiang & Gretzel, 2010; Jun <i>et al.</i> 2012; cited in Navío-Marco <i>et al.</i>, 2018 |
| H2: Tourists acknowledge that social media influence the perception one has of a destination when deciding where to travel. | <ol style="list-style-type: none"> 1. Social media could be used to understand the consumer decisions making process | <ol style="list-style-type: none"> 1. Kaplan & Haenlein, 2010, cited in Icoz, Kutuk, & Icoz, 2018 2. Tafveez, 2017 |

| | | |
|--|--|--|
| | <ol style="list-style-type: none"> 2. Tourism destination had to adapt and start using social media 3. Websites that had any connection to social media were more productive and competent in marketing its tourism business than standard marketing techniques 4. Social media is used the majority of times at the post trip phase in order to share experiences | <ol style="list-style-type: none"> 3. Milano <i>et al.</i>, 2011 4. Zivkovic <i>et al.</i>, 2014 |
| H3: Tourists acknowledge that photos/videos influence the perception one has of a destination when deciding where to travel. | <ol style="list-style-type: none"> 1. There are two kinds of community websites: photo sharing and review/opinion sites 2. Instagram is an app where users post photos with captions 3. It was at first an online photography sharing app 4. It evolved into an app where it is possible to find companies and individuals advertising and using the platform as a distribution mean 5. YouTube is an online video sharing platform | <ol style="list-style-type: none"> 1. Navío <i>et al.</i> (2018) 2. Smith, 2018 3. Fatanti & Suyadnya, 2015 4. Hoffman & Novak, 1996; Sweeney, 2000; Doolin <i>et al.</i>, 2002; cited in Fatanti & Suyadnya, 2015 5. Snelson, 2011 |
| H4: Tourists acknowledge that emerging technologies influence the perception one has of a destination when deciding where to travel. | <ol style="list-style-type: none"> 1. New concept: Ambient Intelligence Tourism, basically consists on a variety of emerging technologies | <ol style="list-style-type: none"> 1. Buhalis, 2019 |
| H5: The localization of the destination influences the decision-making process of tourists when it comes to choosing a destination. | <ol style="list-style-type: none"> 1. Tourists need to acknowledge a destination as being attractive and worth the visit with all of what entails visiting another place | <ol style="list-style-type: none"> 1. Cooper <i>et al.</i> (p. 103, 1999) |

| | | |
|---|---|-----------------------------------|
| <p>H6: The pricing offered online influences the decision-making process of tourists when it comes to choosing a destination.</p> | <p>1. Most tourism companies communicate directly with their consumers when it comes to web-only fares and rates, due to saved commissions and distributions charges that are present in a shorter value chain.</p> | <p>1. Buhalis & Law, 2008</p> |
|---|---|-----------------------------------|

Source: Own Elaboration

Chapter 4: Result Analysis

Characterization Socio-Demographic of the Respondents

In total, there are 385 respondents to the survey. As the Figure 4.1 shows, out of the 385 respondents, 67,27% are female and 32,73% are male. According to Figure 4.2, the biggest age groups amongst the respondents are 16 to 25 years old with 27%, followed by 56 to 65 years old and both 36 to 45 and 46 to 55 years old age groups come in third with 18% of the respondents belonging to these age groups. When it comes to the nationality of respondents, as shown in the Table 4.1, the vast majority is Portuguese (95,84%) while the rest of the respondents are from all over the world but mainly from Europe (4,16%). According to Table 4.2, 47,3% of the respondents have a Master degree, 26,5% have a bachelor degree, 20% have stopped their education when they graduated high school, meaning that 20% of the respondents have the 12th grade; 4,9% have a PhD, and only 1,3% of the respondents have an education until the 9th grade. The next variable that is important to analyze is the professional situation of the respondents. So, according to Table 4.3, 73,8% of the respondents are currently employed, 15,8% are students, 7,8% are retired and only 2,6% are unemployed. Table 4.4 shows that the main purpose of the respondents to travel is leisure with 91,9% of the respondents saying that is their main reason to travel, 5,2% said the main reason for travel is work, while 2,6% travel for education purposes, and only 0,3% usually travel due to religion reasons. Another data to take into consideration is that, according to Table 4.5, 67,8% of the respondents usually travel with family, 24,7% of the respondents tend to travel with friends, 5,5% usually travel alone and only 2,1% travel with work colleagues. Finally, when it comes to the number of trips the respondents usually do per year, following Table 4.6, 35,3% said they travel 2 times in a year, 28,1% travel 1 time in a year, 18,7% travel 3 times per year, 17,4% travel more than 3 times in a year and only 0,5% of the respondents do not travel in a year.

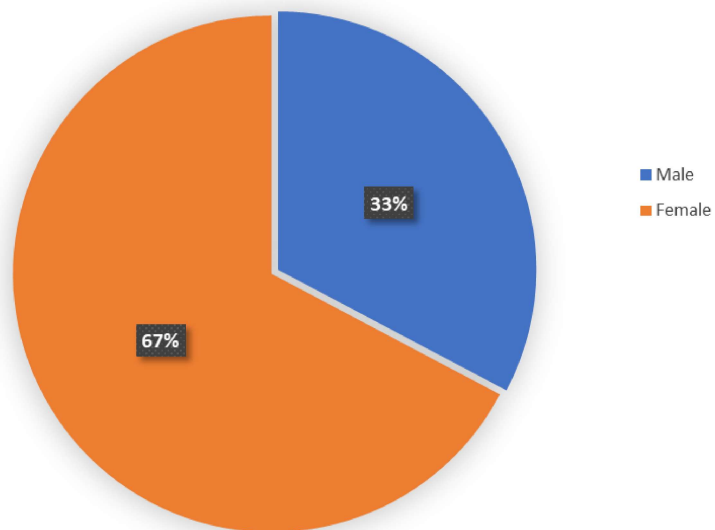


Figure 4.1: Sex of the respondents
Source: SPSS Data

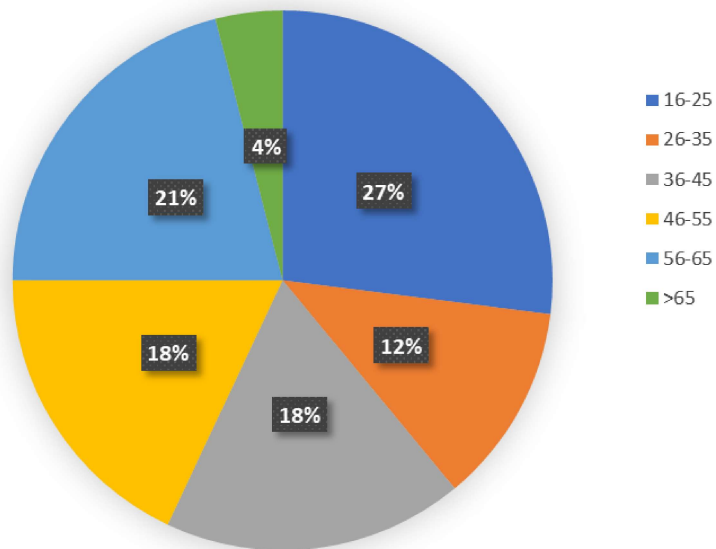


Figure 4.2: Age of the respondents
Source: SPSS Data

Table 4.1: Nationality

| Nationality | Frequency | Percentage |
|-------------|-----------|------------|
| Portuguese | 369 | 95,84% |
| Other | 16 | 4,16% |
| Total | 385 | 100% |

Source: SPSS Data

Table 4.2: Education Level

| | | Frequency | Percentage |
|-------|---|-----------|------------|
| Valid | Middle School (Until 9th grade) | 5 | 1,3 |
| | Highschool (Until 12 th grade) | 77 | 20 |
| | Bachelor | 102 | 26,5 |
| | Master | 182 | 47,3 |
| | PhD | 19 | 4,9 |
| | Total | 385 | 100 |

Source: SPSS Data

Table 4.3: Professional Situation

| | | Frequency | Percentage |
|-------|------------|-----------|------------|
| Valid | Unemployed | 10 | 2,6 |
| | Student | 61 | 15,8 |
| | Employed | 284 | 73,8 |
| | Retired | 30 | 7,8 |
| | Total | 385 | 100 |

Source: SPSS Data

Table 4.4: Main purpose of the trips

| | | Frequency | Percentage |
|-------|-----------|-----------|------------|
| Valid | Leisure | 354 | 91,9 |
| | Work | 20 | 5,2 |
| | Education | 10 | 2,6 |
| | Religion | 1 | 0,3 |
| | Total | 385 | 100 |

Source: SPSS Data

Table 4.5: With whom do you normally travel with

| | | Frequency | Percentage |
|-------|------------|-----------|------------|
| Valid | Alone | 21 | 5,5 |
| | Family | 261 | 67,8 |
| | Friends | 95 | 24,7 |
| | Colleagues | 8 | 2,1 |
| | Total | 385 | 100 |

Source: SPSS Data

Table 4.6: Number of trips per year

| N° of trips per year | Frequency | Percentage |
|----------------------|-----------|------------|
| 0 | 2 | 0,5% |
| 1 | 108 | 28,1% |
| 2 | 136 | 35,3% |
| 3 | 72 | 18,7% |
| >3 | 67 | 17,4% |
| Total | 385 | 100% |

Source: SPSS Data

Behavioral Analysis

Throughout the survey, several other questions were asked in order to better understand the behavior of the respondents and the process of deciding a travel destination. To do so, the first question asked was regarding the information sources when deciding a destination. It was possible to find out, as we can see in Table 4.7, that among the 385 respondents almost all of them use the Internet in order to search for tourism information (97,7% of the respondents said they used the Internet). One curious finding was that almost every respondent uses family and friends as a source of information, 89,1% of respondents admitted to use family and friends as a source of information. It is also possible to understand that most of the respondents (58,7% of the respondents) do not use Travel Agencies in order to find out more information about a tourism destination. When it comes to Books and Magazines, 53% of the respondents said they did **not** use them to search for tourism information. 50,9% of the respondents said they did not use travel guides as a source of information while 49,1% said they used travel guides to search information regarding a tourism destination. Finally, only 4,4% of respondents said they did not search for information.

Table 4.7: Where do you search for tourism information?

| | | Frequency | Percentage |
|---------------------------------|-------|-----------|------------|
| Internet | Yes | 376 | 97,7 |
| | No | 9 | 2,3 |
| | Total | 385 | 100 |
| Books & Magazines | Yes | 181 | 47 |
| | No | 204 | 53 |
| | Total | 385 | 100 |
| Travel Agencies | Yes | 159 | 41,3 |
| | No | 226 | 58,7 |
| | Total | 385 | 100 |
| Travel Guides | Yes | 189 | 49,1 |
| | No | 196 | 50,9 |
| | Total | 385 | 100 |
| Family & Friends | Yes | 343 | 89,1 |
| | No | 42 | 10,9 |
| | Total | 385 | 100 |
| I do not search any information | Yes | 17 | 4,4 |
| | No | 368 | 95,6 |
| | Total | 385 | 100 |

Source: SPSS Data

The second question asked in the survey after knowing where the respondents searched for information was about the kind of information the respondents search for. As it is possible to see in Table 4.8, 94,5% of the respondents said they search for destinations; 96,1% said they searched for accommodation; 79,5% stated that one of the searched topics was transportation; 88,3% said they searched for attractions; 70,6% of the respondents said they searched for restaurants; 62,9% said they searched for photos or videos of the destination; and, 32,7% of the respondents said they searched for other kind of information. Out of the 32,7% that declared they search for other kind of information, 79,4% said they searched for cultural events while the remaining 20,6% said they searched for other and more diverse information.

Table 4.8: What kind of information do you search?

| | | Frequency | Percentage |
|-----------------|-----------------|-----------|------------|
| Destinations | Yes | 364 | 94,5 |
| | No | 21 | 5,5 |
| | Total | 385 | 100 |
| Accommodation | Yes | 370 | 96,1 |
| | No | 15 | 3,9 |
| | Total | 385 | 100 |
| Transportation | Yes | 306 | 79,5 |
| | No | 79 | 20,5 |
| | Total | 385 | 100 |
| Attraction | Yes | 340 | 88,3 |
| | No | 45 | 11,7 |
| | Total | 385 | 100 |
| Restaurants | Yes | 272 | 70,6 |
| | No | 113 | 29,4 |
| | Total | 385 | 100 |
| Photo or videos | Yes | 242 | 62,9 |
| | No | 143 | 37,1 |
| | Total | 385 | 100 |
| Other | Yes | 126 | 32,7 |
| | No | 259 | 67,3 |
| | Total | 385 | 100 |
| Other - Yes | Cultural events | 100 | 79,4 |
| | Other | 26 | 20,6 |
| | Total | 126 | 100 |

Source: SPSS Data

The third question to be asked was to try to understand whether or not the respondents rely on mobile technology when travelling. Regarding this question, 94,3% of the respondents said they did rely on mobile technology when travelling, as it is possible to see in Table 4.9.

Table 4.9: Do you rely on mobile technology when travelling?

| | | Frequency | Percentage |
|-------|-------|-----------|------------|
| Valid | Yes | 363 | 94,3 |
| | No | 22 | 5,7 |
| | Total | 385 | 100 |

Source: SPSS Data

The next question that was asked the respondents was what were the mobile devices that the respondents use the most when travelling. As far as one can see on Table 4.10, 98,4% of the respondents said they used their smartphone when travelling; 63,4% confirmed the use of a camera when travelling; 76,9% said they did not use a laptop when travelling; and, 72,7% said they did not use a tablet when travelling.

Table 4.10: Which mobile devices do you use the most when travelling?

| | | Frequency | Percentage |
|------------|-------|-----------|------------|
| Smartphone | Yes | 379 | 98,4 |
| | No | 6 | 1,6 |
| | Total | 385 | 100 |
| Tablet | Yes | 105 | 27,3 |
| | No | 280 | 72,7 |
| | Total | 385 | 100 |
| Laptop | Yes | 89 | 23,1 |
| | No | 296 | 76,9 |
| | Total | 385 | 100 |
| Camera | Yes | 244 | 63,4 |
| | No | 141 | 36,6 |
| | Total | 385 | 100 |

Source: SPSS Data

Another question asked was to understand whether the respondents use online travel review sites when searching for a travel destination (Table 4.11), to which 80,3% of the respondents answered that they used this kind of sites when searching for a travel destination. Out of those, 70,1% use Booking.com; 51,4% use Tripadvisor when searching for a travel destination; only 25,5% use Trivago; and, 13,2% use other travel sites. Out of the 13,2% that

answered they used other travel review sites, 25,5% use Airbnb while the rest (74,5%) use other smaller and different kinds of review sites.

Table 4.11: I tend to use travel review sites when searching for a travel destination. If yes, which ones?

| | | Frequency | Percentage |
|--|-------------|-----------|------------|
| I tend to use travel review sites when searching for a travel destination. | Yes | 309 | 80,3 |
| | No | 76 | 19,7 |
| | Total | 385 | 100 |
| If yes which ones? | Tripadvisor | 198 | 51,4 |
| | Booking.com | 270 | 70,1 |
| | Trivago | 98 | 25,5 |
| | Other | 51 | 13,2 |
| If yes which ones? - Other | Airbnb | 13 | 25,5 |
| | Other | 38 | 74,5 |

Source: SPSS Data

The next question that was asked, within this behavioral analysis, was whether the respondents tend to actively participate in the rating of accommodations, restaurants or attractions on online travel reviews/ratings sites (Table 4.12), to which 51,7% of the respondents said they do not tend to do so. However, among the 48,3% of people that tend to participate in the rating of accommodations, restaurants or attractions on online travel reviews/ratings sites, 34% do it on Booking.com; 27,3% do it on Tripadvisor; 9,9% do it on Trivago; and, 6% said that they participate in the raking of accommodations, restaurants or attractions on different sites. It is important to know what are the other websites in which people actively participate in the rating system, so out of the 6%, 26,1% said they participate in the ranking system on Google; 17,4% ranks accommodation on Airbnb; and, 13% rank restaurants on Zomato.

Table 4.12: I tend to actively participate in the rating of accommodations, restaurants or attractions on online travel reviews/rating sites. If yes, which ones?

| | | Frequency | Percentage |
|---|-------------|-----------|------------|
| I tend to actively participate in the rating of accommodations, restaurants or attractions on online travel reviews/rating sites. | Yes | 186 | 48,3 |
| | No | 199 | 51,7 |
| | Total | 385 | 100 |
| If yes, in what online travel review/rating sites do you do that? | Tripadvisor | 105 | 27,3 |
| | Booking.com | 131 | 34 |
| | Trivago | 38 | 9,9 |
| | Other | 23 | 6 |
| If yes, in what online travel review/rating sites do you do that? - Other | Google | 6 | 26,1 |
| | Airbnb | 4 | 17,4 |
| | Zomato | 3 | 13 |
| | | | |

Source: SPSS Data

The next finding that the survey tried to understand was whether the respondents tend to look for the rating of destinations, restaurants, accommodation or attractions/activities. Table 4.13 shows that 86,2% of the respondents tend to look for ratings. Out of those, 66,5% look for ratings on Booking.com; 62,1% look for ratings on Tripadvisor; 23,4% look it up on Trivago; and 10,4% look for rating in other platforms. Out of the 10,4% that pay attention to ratings in other platforms, 27,5% look for ratings on google; 10% on Airbnb; and, 7,5% on Zomato, while the rest 55% look for ratings in other smaller and different platforms.

Table 4.13: I tend to look for the rating of destinations, restaurants, accommodation or attractions/activities. If yes, where?

| | | Frequency | Percentage |
|--|-------------|-----------|------------|
| I tend to look for the rating of destinations, restaurants, accommodation or attractions/activities. | Yes | 332 | 86,2 |
| | No | 53 | 13,8 |
| | Total | 385 | 100 |
| If yes, where? | Tripadvisor | 239 | 62,1 |
| | Booking.com | 256 | 66,5 |
| | Trivago | 90 | 23,4 |
| | Other | 40 | 10,4 |
| If yes, where? - Other | Google | 12 | 27,5 |
| | Airbnb | 4 | 10 |
| | Zomato | 3 | 7,5 |
| | Other | 21 | 55 |

Source: SPSS Data

The next question aimed at understand whether the respondents tended to give their review on online travel review sites and if so in which travel review sites they did such thing. The results were clear with 57,1% of the respondents saying that they did not give their review on online travel review sites. However, it is important to understand in what sites the remaining 42,9% leave their opinion. So, out of those 42,9%, 34,5% give their review on Booking.com;

23,1% give their review on Tripadvisor; 9,1% give their opinion on Trivago; and, 5,2% give their opinion on other travel review sites. Out of the 5,2% that give their opinion in other websites, 20% give their review on Airbnb and 15% on Google, while the rest 65% give their opinion on other smaller websites.

Table 4.14: I tend to give my review on online travel review sites. If yes, which ones?

| | | Frequency | Percentage |
|---|-------------|-----------|------------|
| I tend to give my review on online travel review sites. | Yes | 165 | 42,9 |
| | No | 220 | 57,1 |
| | Total | 385 | 100 |
| If yes, which ones? | Tripadvisor | 89 | 23,1 |
| | Booking.com | 133 | 34,5 |
| | Trivago | 35 | 9,1 |
| | Other | 20 | 5,2 |
| If yes, which ones? - Other | Airbnb | 4 | 20 |
| | Google | 3 | 15 |
| | Other | 13 | 65 |

Source: SPSS Data

Finally, the last question in the behavioral analysis is intended to understand whether the respondents share their travels on social media or not and if they did on which social media platforms, they tend to share their experiences. The results of this question were very much even, with 52,5% saying that they do not tend to share their travel on social media. However, it becomes crucial to understand in what social media platforms the remaining 47,5% share their travels on. As we can see on the Table 4.15, out of those 47,5%, 40% share them on Instagram; 25,5% share their travels on Facebook; 4,7% share them on YouTube; 1,8% share them on Snapchat; and, 0,3% share them on TikTok.

Table 4.15: I tend to share my travels on social media. If yes, which ones?

| | | Frequency | Percentage |
|--|-----------|-----------|------------|
| I tend to share my travels on social media | Yes | 183 | 47,5 |
| | No | 202 | 52,5 |
| | Total | 385 | 100 |
| If yes, which ones? | Facebook | 98 | 25,5 |
| | Instagram | 154 | 40 |
| | YouTube | 18 | 4,7 |
| | Snapchat | 7 | 1,8 |
| | TikTok | 1 | 0,3 |

Source: SPSS Data

H1: Tourists acknowledge that online reviews and ratings influence the perception one has of a destination when deciding where to travel.

In order to analyze H1, it is important to do a binomial test so that we can realize whether there is a significant proportion of respondents that believe that online reviews and ratings influence the perception one has of a destination when deciding where to travel. Therefore, the questions that were used to test this were Yes or No questions. The first one was the following “I tend to use online travel review sites when searching for a travel destination.”, to which 80% of the respondents said “Yes” and the test proportion is 50% meaning that at least 50% of the respondents agree with the sentence. The second one was the following “I tend to read the reviews left by other users on online travel review sites”, to which 86% of the respondents said they agreed with the sentence with a test proportion of 50% as well. The third and final question was “If yes, do those opinions influence your choice?”, and out of the 331 people that said yes in the previous question, 94% of them said those opinions influenced their choice. Also, in order to fully prove that all three results indicate that tourists agree that online reviews and ratings influence the perception one has of a destination when deciding where to travel, it is important to test its normality. Firstly, it is important to understand that for all three questions the Sig is the same therefore the result of the following test can be applied for all three questions. So, first of all it is important to define both H0 and H1, therefore H0: Test Proportion < 0,5; H1: Test Proportion = 0,5. This test follows the rule that says that if Sig < α , then H0 is rejected. As we can see on the Table 4.16, Sig (,000) < α (0,05), therefore we reject H0 and we can assume with 95% of confidence that the results do not follow normality. Hence why the result of the previous test means that the proportion of the variable online reviews and ratings is at least 0,5, meaning that the respondents tend to agree that online reviews and ratings have significative influence over the perception one has of a destination when deciding where to travel.

Table 4.16: Binomial test

| | | Categoria | N | Proporção Observada | Proporção de teste | Sig exata (bilateral) |
|---|---------|-----------|-----|---------------------|--------------------|-----------------------|
| I tend to use online travel review sites when searching for a travel destination. | Grupo 1 | Yes | 309 | ,80 | ,50 | ,000 |
| | Grupo 2 | No | 76 | ,20 | | |
| | Total | | 385 | 1,00 | | |
| I tend to read the reviews left by other users on online travel review sites | Grupo 1 | Yes | 331 | ,86 | ,50 | ,000 |
| | Grupo 2 | No | 54 | ,14 | | |
| | Total | | 385 | 1,00 | | |
| If yes, do those opinions influence your choice? | Grupo 1 | Yes | 310 | ,94 | ,50 | ,000 |
| | Grupo 2 | No | 21 | ,06 | | |
| | Total | | 331 | 1,00 | | |

Source: SPSS Data

H2: Tourists acknowledge that social media influence the perception one has of a destination when deciding where to travel.

Before analyzing H2, it is important to group all questions regarding social media in a single variable (social_media). After that, in order to conclude that the variable significantly influences the perception that an individual has about a tourist destination, the average of that variable must be greater than 3 (which means that individuals tend to agree with the variable). Either way, it is important to validate the result using the t-test for 1 sample because we have quantitative variables, and we intend to test whether the average of the variables is significantly greater than 3 (3 corresponds to the neutral situation / opinion). Therefore, it is important to define both H0 and H1, therefore H0: Average = 3; H1: Average > 3. This test follows the rule that says that if Sig < α , then H0 is rejected. As we can see on the Table 4.17, Sig (,000) < α (0,05), therefore we reject H0 and we can assume with 95% of confidence that the results do not follow normality. The result of the previous test means that the average of the variable social_media is greater than 3, meaning that the respondents tend to agree that social media have significative influence over the perception one has of a destination when deciding where to travel.

H3: Tourists acknowledge that photos/videos influence the perception one has of a destination when deciding where to travel.

In order to better analyze H3, it is also important to group all questions regarding social media in a single variable (photos_videos). After that, in order to conclude that the variable significantly influences the perception that an individual has about a tourist destination, the average of that variable must be greater than 3 (which means that individuals tend to agree with the variable). Either way, it is important to validate the result using the t-test for 1 sample because we have quantitative variables, and we intend to test whether the average of the variables is significantly greater than 3 (3 corresponds to the neutral situation / opinion). Therefore, it is important to define both H0 and H1, therefore H0: Average = 3; H1: Average > 3. This test follows the rule that says that if Sig < α , then H0 is rejected. As we can see on the Table 4.17, Sig (,000) < α (0,05), therefore we reject H0 and we can assume with 95% of confidence that the results do not follow normality. The result of the previous test means that the average of the variable photos_videos is greater than 3, meaning that the respondents tend to agree that photos/videos have significant influence over the perception one has of a destination when deciding where to travel.

H4: Tourists acknowledge that emerging technologies influence the perception one has of a destination when deciding where to travel.

Before analyzing H4, it is also crucial to group all questions regarding social media in a single variable (emerging_technologies). After that, in order to conclude that the variable significantly influences the perception that an individual has about a tourist destination, the average of that variable must be greater than 3 (which means that individuals tend to agree with the variable). Either way, it is important to validate the result using the t-test for 1 sample because we have quantitative variables, and we intend to test whether the average of the variables is significantly greater than 3 (3 corresponds to the neutral situation / opinion). Therefore, it is important to define both H0 and H1, therefore H0: Average = 3; H1: Average > 3. This test follows the rule that says that if Sig < α , then H0 is rejected. As we can see on the Table 4.17, Sig (,632) > α (0,05), therefore we do not reject H0 and we can assume with 95% of confidence that the results follow normality. The result of the previous test means that the average of the variable emerging_technology is equal to 3, meaning that the respondents tend to agree that emerging technology do not have a significant influence over the perception one has of a destination when deciding where to travel.

Table 4.17: T-test for 1 sample

| Test Value = 3 | | | | | | |
|-----------------------|-------|-----|-------------------------|--------------------|---------------------------------------|----------|
| | t | df | Sig. (2 extremities) | Mean Difference | 95% Difference Confidence Interval | |
| | | | | | Inferior | Superior |
| Social_media | 4,478 | 384 | 0,000 | 0,22078 | 0,1238 | 0,3177 |
| Photos_videos | 7,721 | 384 | 0,000 | 0,30390 | 0,2265 | 0,3813 |
| Emerging_technologies | 0,480 | 384 | 0,632 | 0,02338 | -0,0725 | 0,1192 |

Source: SPSS Data

H5: The localization of the destination influences the decision-making process of tourists when it comes to choosing a destination.

In order to analyze H5, it is important to understand that because this variable is ordinal it will have to be analyzed with non-parametric tests and therefore the most important data is the one regarding the median. As it is possible to see on Table 4.18, 92,2% (n=355) of the respondents tends to agree that location is a relevant aspect when deciding a tourism destination. It is also important to look at the median of this variable (median = 5), and once we do that it is clear to see that at least 50% of the respondents said that they strongly agree with the variable. This result combined with the interquartile range of 1, that means that there is not much dispersion on the responses of the individuals, meaning that location influences the decision-making process of tourists when it comes to choosing a destination.

We can also see through the Wilcoxon test that the respondents tend to agree that the location of the destination influences significantly the decision-making process of tourists when it comes to choosing a destination.

Table 4.18: Location is a relevant aspect when deciding a tourism destination

| | | Frequency | Percentage |
|-------|-------------------|-----------|------------|
| Valid | Strongly Disagree | 6 | 1,6 |
| | Disagree | 5 | 1,3 |
| | Neutral | 19 | 4,9 |
| | Agree | 157 | 40,8 |
| | Strongly Agree | 198 | 51,4 |
| | Strongly Agree | 385 | 100 |

Source: SPSS Data

Table 4.19: Descriptive Analysis of “Location is a relevant aspect when deciding a tourism destination”

| | | Statistic | Standard Deviation | |
|---|------------------------------------|----------------|--------------------|--|
| Location is a relevant aspect when deciding a tourism destination | Average | 4,39 | 0,040 | |
| | 95% Difference Confidence Interval | Inferior Limit | 4,31 | |
| | | Superior Limit | 4,47 | |
| | 5% of the trimmed average | 4,48 | | |
| | Median | 5 | | |
| | Variance | 0,604 | | |
| | Standard Error | 0,777 | | |
| | Minimum | 1 | | |
| | Maximum | 5 | | |
| | Amplitude | 4 | | |
| | Interquartile Range | 1 | | |
| | Asymmetry | -1,780 | 0,124 | |
| | Kurtosis | 4,675 | 0,248 | |

Source: SPSS Data

Table 4.20: Test Statistics

| Med – Location is a relevant aspect when deciding a tourism destination | |
|---|----------------------|
| Z | -16,125 ^b |
| Sig. Significance (bilateral) | 0,000 |
| Exact Sig (bilateral) | 0,000 |
| Exact Sig (unilateral) | 0,000 |
| Point probability | 0,000 |

- a. Test of ratings signed by Wilcoxon
- b. Based on positive points

Source: SPSS Data^a

H6: The pricing offered online influences the decision-making process of tourists when it comes to choosing a destination.

The same situation as before applies when analyzing H6, meaning that we have to group all questions regarding price in a single variable (**price**). After that, in order to conclude that the variable significantly influences the perception that an individual has about a tourist destination, the average of that variable must be greater than 3 (which means that individuals tend to agree with the variable). Either way, it is important to validate the result using the t-test for 1 sample because we have quantitative variables, and we intend to test whether the average of the variables is significantly greater than 3 (3 corresponds to the neutral situation / opinion). Therefore, it is important to define both H0 and H1, therefore H0: Average = 3; H1: Average > 3. This test follows the rule that says that if Sig < α , then H0 is rejected. As we can see on the Table 4.21, Sig (,000) < α (0,05), therefore we reject H0 and we can assume with 95% of confidence that the results do not follow normality. The result of the previous test means that the average of the variable price is greater than 3, meaning that the respondents tend to agree that price has significative influence over the perception one has of a destination when deciding where to travel.

Table 4.21: T-test for 1 sample

| Test Value = 3 | | | | | | |
|----------------|--------|-----|--------------------|--------------------|---------------------------------------|----------|
| | t | df | Sig. (2 tailed) | Mean Difference | 95% Difference Confidence Interval | |
| | | | | | Inferior | Superior |
| Preço | 21,267 | 384 | 0,000 | 0,71039 | 0,6447 | 0,7761 |

Source: SPSS Data

Table 4.22: Summary of the analyzed hypothesis

| | Hypothesis | Results |
|----|---|----------|
| H1 | Tourists acknowledge that online reviews and ratings influence the perception one has of a destination when deciding where to travel. | Approved |
| H2 | Tourists acknowledge that social media influence the perception one has of a destination when deciding where to travel. | Approved |
| H3 | Tourists acknowledge that photos/videos influence the perception one has of a destination when deciding where to travel. | Approved |
| H4 | Tourists acknowledge that emerging technologies influence the perception one has of a destination when deciding where to travel. | Rejected |
| H5 | The localization of the destination influences the decision-making process of tourists when it comes to choosing a destination | Approved |
| H6 | The pricing offered online influences the decision-making process of tourists when it comes to choosing a destination. | Approved |

Source: SPSS Data

Chapter 5: Conclusions

This chapter is meant to present the conclusions that are the result of all analysis performed, the main limitations of this study, its academic and practical contributions and suggestions for future investigations.

Results

Some of the main conclusions that can be drawn from the questionnaire are that 1) most of the respondents search information on the internet; 2) the information that is most searched are both the accommodation and destination; 3) the mobile technology that most respondents choose to use while travelling is the smartphone; 4) the variable that influences the most one's perception about a destination is location followed by price. In fact this conclusions are in line with some of the literature review, for instance the first conclusion was also reached by Jenkin (2010; cited in Matikiti-Manyeverere & Kruger, 2019), he defended that when travelers want to visit more unique places the information is based on what they can find online so that they are able to make more responsible decisions. The second and fourth conclusion were also confirmed by Choi *et al.* (2012), who found out that after the destination is chosen, and the purchase is done, the information searched in the post-purchase phase is much more accurate and specific to that particular destination, such as the future weather, food choices, recreation activities and events, and by Cooper *et al.* (p. 103, 1999) who stated, tourists need to acknowledge a destination as being attractive and worth the visit with all of what entails visiting another place (money and time). This makes a lot of sense because people need to firstly decide where to go and where to stay to only after that search for things to do or visit in that particular destination.

Out of the six attributes that were the target of this research, mainly: online reviews and ratings, social media, photos/videos, emerging technologies, location and price, the respondents acknowledge that online reviews and ratings, social media, photos/videos, location and price influence one's decision making process when choosing a tourist destination. However, when it comes to the variable emerging technologies the respondents do not believe it has any influence when they decide where to travel. This result may be because the majority of the respondents are at least 36 which means that because the respondents tend to be older people, they also tend to adopt new technologies only once these technologies are established technologies and not emerging ones. In fact, according to table 5.1, the higher the age the less relevant are emerging technologies.

Table 5.1: Correlations between age groups and all hypothesis

| | | | Escalões_etários | Do online reviews and ratings influence your choice ? | Social_media | Photos_videos | Emerging_technologies | preço | Location is a relevant aspect when deciding a tourism destination |
|----------------|------------------|-------------------------|------------------|---|--------------|---------------|-----------------------|--------|---|
| Spearman's rho | Escalões_etários | Correlation Coefficient | 1 | 0,193 | -0,125 | -0,320 | -0,116 | -0,139 | -0,078 |
| | | Sig. (2-tailed) | | 0,000 | 0,014 | 0,000 | 0,023 | 0,006 | 0,129 |
| | | N | 385 | 331 | 385 | 385 | 385 | 385 | 385 |

Source: SPSS Data

After analyzing all hypothesis, it, also, becomes interesting to rank them from the one that influences the most to the ones that influence the least the decision-making process of a tourism destination. In order to do so, we need to look for the mean of each hypothesis and rank them accordingly.

As it is possible to see in Table 5.2, the variable that influences the most the decision-making process of one's tourism destination is Location, which makes sense because everybody no matter the age, sex or reason for travelling tends to travel to somewhere where they really want to go or need to be. The next variable that influences the most is Price, followed by photos and videos, social media and emerging technologies.

Table 5.2: Descriptive Information

| | | | Statistic | Std. Error |
|--------------|----------------------------------|-------------|-----------|------------|
| social_media | Mean | | 3,2208 | 0,04930 |
| | 95% Confidence Interval for Mean | Lower Bound | 3,1238 | |
| | | Upper Bound | 3,3177 | |
| | 5% Trimmed Mean | | 3,2494 | |
| | Median | | 3,3333 | |
| | Variance | | 0,936 | |
| | Std. Deviation | | 0,96736 | |
| | Minimum | | 1,00 | |

| | | | |
|----------------------------------|----------------------------------|-------------|---------|
| | Maximum | 5,00 | |
| | Range | 4,00 | |
| | Interquartile Range | 1,33 | |
| | Skewness | -0,494 | 0,124 |
| | Kurtosis | -0,213 | 0,248 |
| photos_videos | Mean | 3,3039 | 0,03936 |
| | 95% Confidence Interval for Mean | Lower Bound | 3,2265 |
| | | Upper Bound | 3,3813 |
| | 5% Trimmed Mean | 3,3170 | |
| | Median | 3,4000 | |
| | Variance | 0,596 | |
| | Std. Deviation | 0,77231 | |
| | Minimum | 1,00 | |
| | Maximum | 5,00 | |
| | Range | 4,00 | |
| | Interquartile Range | 1,00 | |
| | Skewness | -0,325 | 0,124 |
| | Kurtosis | 0,257 | 0,248 |
| | emerging_technologies | Mean | 3,0234 |
| 95% Confidence Interval for Mean | | Lower Bound | 2,9275 |
| | | Upper Bound | 3,1192 |
| 5% Trimmed Mean | | 3,0292 | |
| Median | | 3,0000 | |
| Variance | | 0,915 | |
| Std. Deviation | | 0,95646 | |
| Minimum | | 1,00 | |
| Maximum | | 5,00 | |
| Range | | 4,00 | |
| Interquartile Range | | 1,50 | |
| Skewness | | -0,260 | 0,124 |
| Kurtosis | | -0,164 | 0,248 |
| preço | | Mean | 3,7104 |
| | 95% Confidence Interval for Mean | Lower Bound | 3,6447 |
| | | Upper Bound | 3,7761 |
| | 5% Trimmed Mean | 3,7266 | |
| | Median | 4,0000 | |
| | Variance | 0,430 | |
| | Std. Deviation | 0,65542 | |
| | Minimum | 1,00 | |
| | Maximum | 5,00 | |
| | Range | 4,00 | |
| Interquartile Range | 0,50 | | |

| | | | |
|--|----------------------------------|-------------|-------|
| | Skewness | -0,555 | 0,124 |
| | Kurtosis | 0,752 | 0,248 |
| Location is a relevant aspect when deciding a tourism destination. | Mean | 4,39 | 0,040 |
| | 95% Confidence Interval for Mean | Lower Bound | 4,31 |
| | | Upper Bound | 4,47 |
| | 5% Trimmed Mean | 4,48 | |
| | Median | 5,00 | |
| | Variance | 0,604 | |
| | Std. Deviation | 0,777 | |
| | Minimum | 1 | |
| | Maximum | 5 | |
| | Range | 4 | |
| | Interquartile Range | 1 | |
| | Skewness | -1,780 | 0,124 |
| | Kurtosis | 4,675 | 0,248 |

Source: SPSS Data

Academic Contributions

This research was made with the sole objective of proving that modern technology, such as online reviews and ratings, social media, photos/videos and emerging technologies, as well as price and the specific location of the destination have the power to influence one's decision making process when choosing a tourism destination. This research has always had the intent to broaden and complement the studies that were already done in the world regarding this topic, because as it was already mentioned it was found some gaps in the already existent studies.

With this study and more specifically thanks to the quantitative methodology used, the link between all of the modern technology that was previously mentioned, as well as the price and the location of the destination with the decision-making process of the respondents when deciding where to travel next was proven. The questionnaire also allowed to gather more information, from such a different group of people when it comes to age groups, regarding the habits of the respondents prior-travel, during the travel and post-travel. This information may be useful for future researches regarding the human behavior when deciding where to travel.

Practical Contributions

It is crucial for marketers and service providers to know the influences of online reviews and ratings, social media, photos/videos and emerging technologies as well as of price and location of a tourism destination, such as, how they impact the destination image one has over

a tourism destination, so that both marketers and service providers can create better communication plans and engage with costumers in proper channels meeting their needs and expectations through those same channels. As concluded, although the majority of these variables did indeed show that they influenced the destination image one has over a certain tourism destination there was one that did not influence the destination image one has over a tourism destination.

As it was proved in the table 4.17, the respondents do not feel that they are influenced by emerging technologies, this is important to know because now marketers know that it is not worth to try to influence tourists with this kind of technology because it has minimal effect on the perception a tourist has over a destination. However, this result may occur because the majority of the respondents are older than 35, and according to table 5.1, the higher the age the less relevant are emerging technologies. However, marketers could invest their efforts into social media marketing using photos and videos which are factors that help tourist to get a more precise image of the destination, as well as trying to get good online reviews which is only possible if the real-life experience of a tourist is a really positive one.

In addition, marketing messages should be spread through the right sources that the targets mainly rely on. As the results show, clearly nowadays most people search information regarding a tourism destination using the internet, and most people that answered the questionnaire use and rely on their smartphone when travelling. This means that marketers and service providers need to adapt all the information to the online world and to be compatible with the form factor of smartphones which is 9:16.

Also, despite the internet being the main source for information in the tourism sector, tourists still support their perception of any destination with the power of word-of-mouth.

Furthermore, destinations should try to keep and develop even better relationships with tourists. It is important that they make sure that tourists have good experiences while visiting them so that after the trip they are more willing to spread a positive word-of-mouth, either by talking to their friends and family but also by posting online photos and videos, and reviewing positively the experiences they had. This is important in order to give more credibility to the destination and for more future tourists to have a good perception of the destination before deciding to travel there.

In short, marketers and service providers should understand that if tourists have a very good experience in the destination, they are much more willing to share both online and offline that their experience was amazing therefore contributing to the image destination that future tourists create about the destination.

Limitation and Future Research

Although this research provides clear insights regarding the influence technology as a whole has over the creation of one's perception of a destination, there are also some limitations that are worthy of our attention because they could be countered in a future research.

Firstly, in order to keep some consistency, instead of using Yes or No questions to analyze H1 it should have been used a matrix table to collect the answers related to the questions that cover the variable H1 (online reviews and ratings), like it was used for the rest of the hypothesis. That is why to analyze H1 it was used a binominal test.

Secondly, despite the size of the sample following the formula presented on Durbarry (2018), it is clear that the sample size is too small to make any generalizations, hence why we should look at this results with some attention and caution and never fall into the mistake of saying that all tourists feel this way, but rather say that the respondents feel the way they answered. In the future, it would be interesting to test the same questionnaire to a much broader audience and compare those results with the ones that were obtained now.

Thirdly, the results of this study cannot be replicated to other industries. It is important to understand that the results of this research are focused on the tourism sector and therefore one cannot assume that the same results apply to other sectors. In the future it could be interesting to test the same questionnaire but applying it to another sector.

Last but not least, the quantitative approach may be limited in order to get the most reliable results possible (Wimmer and Dominick, 2000). Although the sample size follows the formula presented on Durbarry (2018), it may be too small to make generalizations and to firmly support the results obtained. Therefore, if in the future one increases the sample size and adds to the quantitative approach a qualitative approach, this would produce more precise and meaningful outcomes.

To conclude, future research and studies could improve by: 1) being consistent in the types of tests one does to analyze the answers received; 2) increasing the sample size to a much more substantial number; 3) seeing whether respondents behave the same way when deciding to purchase something in another sector; 4) approaching the topic with a qualitative approach in order to get a more precise and trustworthy results.

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Appendix

Appendix A: Questionnaire

Start of Block: Bloco 3

Q0 The present questionnaire is being carried out by a student from the ISCTE Business School Master of Management, within the scope of the research developed in his dissertation with the theme The Impact of Social Networks in the Choice of a Tourist Destination. The recipients of this questionnaire are all respondents who have already traveled. There are no right or wrong answers, you should try to answer according to your sincere opinion. Your answers are completely anonymous and the data collected will only be used for academic purposes. The questionnaire will take approximately 10 minutes to complete. This survey will be divided into 3 parts: In the **first** part, we intend to understand what are the main sources of information of the respondents when traveling and to study whether price and location are key aspects when deciding where to travel. In this phase the questions will have several options and the objective is for the respondents to answer with the one that fits best with them, some of the answers for these questions have the Likert scale (1- totally disagree; 2- Disagree; 3- Neutral; 4- Agree; 5- Strongly Agree). In the **second** part, the focus is on understanding the relationship between the respondents and technology and try to understand whether technology influences the perception one has of a destination. In this part, the respondents will have Yes or No questions, multiple-choice questions and some questions where the respondents will have to choose the answer that fits best with them having into account a Likert scale (1- totally disagree; 2- Disagree; 3- Neutral; 4- Agree; 5- Strongly Agree). In the **third** part, the answers of the respondents will give us an idea of his/her profile.

Do you agree to voluntarily participate in this questionnaire?

Yes (1)

No (2)

End of Block: Bloco 3

Start of Block: Part 1 – Information Sources & Price and Location

Q1 Select the options where you search for tourism information.

| | Where do you search tourism information? | |
|--|--|-----------------------|
| | Yes (1) | No (2) |
| Internet (Q1_1) | <input type="radio"/> | <input type="radio"/> |
| Books and Magazines (Q1_2) | <input type="radio"/> | <input type="radio"/> |
| Travel Agencies (Q1_3) | <input type="radio"/> | <input type="radio"/> |
| Travel Guides (Q1_4) | <input type="radio"/> | <input type="radio"/> |
| Family and Friends (Q1_5) | <input type="radio"/> | <input type="radio"/> |
| I do not search any information (Q1_6) | <input type="radio"/> | <input type="radio"/> |

Q2 What kind of information do you search for?

| | What kind of information do you search? | |
|---------------------|---|-----------------------|
| | Yes (1) | No (2) |
| Destinations (1) | <input type="radio"/> | <input type="radio"/> |
| Accommodation (2) | <input type="radio"/> | <input type="radio"/> |
| Transportation (3) | <input type="radio"/> | <input type="radio"/> |
| Attractions (4) | <input type="radio"/> | <input type="radio"/> |
| Restaurants (5) | <input type="radio"/> | <input type="radio"/> |
| Photo or videos (6) | <input type="radio"/> | <input type="radio"/> |
| Other (7) | <input type="radio"/> | <input type="radio"/> |

Q3 If you selected ‘Other’, explain what kind of information do you search for.

Q4 Read carefully all sentences and answer from Strongly Disagree to Strongly Agree:

| | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Price is a relevant aspect when deciding a tourism destination. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I tend to take into consideration if a destination has web-only fares and rates when deciding where to go. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Location is a relevant aspect when deciding a tourism destination. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

End of Block: Part 1 – Information Sources & Price and Location

Start of Block: Part 2 - Technology and Destination Image

Q5 Do you rely on mobile technology when travelling?

- Yes (1)
- No (2)

Which mobile devices do you use the most when travelling?

| | Yes (1) | No (2) |
|----------------|-----------------------|-----------------------|
| Smartphone (1) | <input type="radio"/> | <input type="radio"/> |
| Tablet (2) | <input type="radio"/> | <input type="radio"/> |
| Laptop (3) | <input type="radio"/> | <input type="radio"/> |
| Camera (4) | <input type="radio"/> | <input type="radio"/> |

Q6 Which mobile devices do you use the most when travelling?

Q7 Read carefully the following sentences and answer from Strongly Disagree to Strongly Agree:

| | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| I tend to use technology when searching for information regarding a destination. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Technology helps me to have an idea of different destinations before travelling there (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Q8 I tend to use online travel review sites when searching for a travel destination.

Yes (1)

No (2)

Q9 If yes, which ones?

Tripadvisor (1)

Booking.com (2)

Trivago (3)

Other (4)

Q10 If you selected 'Other' which platform do you use?

Q11 I tend to actively participate in the rating of accommodations, restaurants or attractions on online travel review/rating sites.

Yes (1)

No (2)

Q12 If yes, in what online travel review/rating sites do you do that?

Tripadvisor (1)

Booking.com (2)

Trivago (3)

Other (4)

Q13 If you selected 'Other' which platform do you use?

Q14 I tend to look for the rating of destinations, restaurants, accommodation or attractions / activities.

Yes (1)

No (2)

Q15 If yes, in what online travel review sites do you look for the ratings?

Tripadvisor (1)

Booking.com (2)

Trivago (3)

Other (4)

Q16 If you selected 'Other' which platform do you use?

Q17 I tend to give my review on online travel review sites.

Yes (1)

No (2)

Q18 If yes, which ones?

Tripadvisor (1)

Booking.com (2)

Trivago (3)

Other (4)

Q19 If you selected 'Other' which platform do you use?

Q20 I tend to read the reviews left by other users on online travel review sites.

Yes (1)

No (2)

Q21 If yes, do those opinions influence your choice?

Yes (1)

No (2)

Q22 I tend to share my travels on social media.

Yes (1)

No (2)

Q23 If yes, which ones?

Facebook (1)

Instagram (2)

YouTube (3)

Snapchat (4)

TikTok (5)

Q24 Read carefully the following sentences and answer from Strongly Disagree to Strongly Agree:

| | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Social media is important when I choose a tourism destination. (Q22_1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I tend to use social media when searching a tourism destination. (Q22_2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Social media shapes the perception I have about a destination. (Q22_3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Photos/videos are a relevant aspect when deciding a tourism destination. (Q22_4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| When deciding where to go I tend to search for photos and videos. (Q22_5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I search for photos of | | | | | |

For this next two questions take into consideration emerging technologies such as 5G; Radio Frequency Identification; mobile devices, wearable smartphones and smartwatches; apps along with APIs; Cryptocurrency and Blockchain; sensor and beacon networks; pervasive computing, gamification as well as enhanced analytical capabilities supported by artificial intelligence and machine learning.

Q25 Read carefully the following sentences and answer from Strongly Disagree to Strongly Agree:

| | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| I tend to use emerging technologies when deciding where to travel to. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Thanks to emerging technologies I have changed the idea I had of a destination. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Start of Block: Part 3 - Respondents' profile

Q26 Sex:

Male (1)

Female (2)

Q27 Age:

Q28 Nationality:

Q29 Education Level:

Middle School (Until 9th grade) (1)

Highschool (Until 12th grade) (2)

Bachelor (3)

Master (4)

PhD (5)

Q30 Professional situation:

- Unemployed (1)
 - Student (2)
 - Employed (3)
 - Retired (4)
-

Q31 Main purpose of the trips:

- Leisure (1)
 - Work (2)
 - Education (3)
 - Religion (4)
-

Q32 With whom do you normally travel with:

- Alone (1)
 - Family (2)
 - Friends (3)
 - Colleagues (4)
-

Q33 Number of trips per year:
