

**THE USE OF SOCIAL MEDIA IN TRAVEL PLANNING:
SOLUTIONS FOR DESTINATION MANAGEMENT
ORGANIZATIONS (DMOs)**

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Abstract

Social media has been a widely discussed subject in the marketing and tourism literature. Even though most of tourism entities have adopted social media as marketing tool, its real potential and benefits still remain unclear for most of companies and businesses involved. Also, there is little evidence on the purposes of using social media in the travel planning and whether these platforms are relevant or not for companies to market their products and destinations.

This project aims at understanding the role of social media in tourists' travel planning while analyzing the current role of Destination Management Organizations (DMOs) in destination promotion. This study comprised a survey with 200 tourists visiting the city of Lisbon. It was examined their usage of social media in travel planning, sites content information and influence in their travel plans and destination image. The analysis suggests social media is a relevant source in tourists' travel planning, providing a wide range of information and used throughout all travel planning stages. Also, research claimed social media content is perceived as trustworthy and it will influence tourists travel plans as well as tourists' destination overall image. In addition, the current level knowledge and satisfaction with Portuguese DMOs social media sites content and features was also analyzed and further combined with a qualitative study of two DMOs interviews.

This work provides insights of social media usage in the travel context and ultimately point solutions for DMOs to use them as a marketing tool. Given the fact this is one of the first studies analyzing Portuguese DMOs social sites, several recommendations are provided for future research.

Keywords: Tourism; Marketing; Social Media; Travel Planning; Destination Image; Destination Management Organization (DMO).

JEL Codes: L83, M31.

Resumo

O tema das redes sociais tem sido amplamente discutido na literatura de marketing e turismo. Ainda que a maior parte das entidades turísticas tenha adotado as redes sociais como ferramenta de marketing, o seu potencial e benefícios ainda parecem não ser totalmente conhecidos pela maior parte das empresas e negócios. Acresce a isto, parece predominar pouca fundamentação científica relativamente aos motivos de utilização das redes sociais no planeamento de viagens, e na importância destas plataformas para as empresas na promoção de produtos e destinos.

A presente tese procura aprofundar o papel das redes sociais no planeamento das viagens pelos turistas e analisar o papel atual das *Destination Management Organizations* (DMOs) portuguesas na promoção do destino. Este estudo compreendeu uma pesquisa quantitativa a 200 turistas que visitavam a cidade de Lisboa. Foram examinadas a utilização das redes sociais no planeamento das viagens, conteúdo dos *sites* e influência nos planos de viagem e imagem do destino. A análise sugere que as redes sociais são uma fonte relevante no planeamento das viagens pelos turistas e usada durante as fases de planeamento da viagem. Sugere-se ainda que o conteúdo apresentado nas redes sociais é confiável e que este influencia os planos de viagem bem como a imagem do destino pelos turistas. O nível de conhecimento e satisfação como os sites de redes sociais dos *DMOs* portugueses foram também analisados e posteriormente combinados com um estudo qualitativo de duas entrevistas a *DMOs* nacionais.

Este projeto visa contribuir para uma melhor compreensão da utilização das redes sociais no âmbito turístico e sugerir soluções para os *DMOs* para utilização destas plataformas como meio de promoção. Sendo este estudo pioneiro na análise das redes sociais destas entidades turísticas, é apontado um número de sugestões para pesquisa futura nesta área.

Palavras-Chave: Turismo; Marketing; Redes Sociais; Planeamento de Viagem; Imagem do Destino; Destination Management Organization (DMO).

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List of Abbreviations

ATL – Associação de Turismo de Lisboa

DMOs – Destination Management Organizations

ERT-RL – Entidade Regional de Turismo para a Região de Lisboa

SMC – Social Media Content

SM&TR – Social Media and Travel Review sites

TDI – Tourism Destination Image

TIS – Travel Information Source

TP – Turismo de Portugal

UGC – User Generated Content

UNWTO – United Nations World Tourism Organization

VFR – Visiting Family and Relatives

WOM – Word Of Mouth

WTTC – World Travel and Tourism Council

Chapter I Introduction

In recent years, the development of new technologies has changed the travel industry. Technological developments in the sector and the propagation of low cost airline carriers have exponentially increased tourism activity across the world. Along with the rise of new technological developments, other socio-economic factors such as higher real incomes, more leisure time and new communication systems have also contributed to promote both tourism and economic development (UNWTO, 2013). The increase in the travel activity has led to the development of communication and distribution systems, which have become crucial to tourism business. Due to its intangible characteristics, travel goods are often misperceived and hard to attract potential customers. Tourism has relied on destination reputation, consumer opinion, spread of information and positive word-of-mouth (Zeng & Gerritsen 2014).

Evolving from a static web to a new interactive platform of travel-related applications, the availability of information online has facilitated tourism marketing, and influenced the way tourists perceived destinations and travel products. The emergence of Web 2.0, along with a fast pace development of online marketing tools, has widely spread throughout several businesses, including the hospitality sector. The propagation of social media platforms has enabled travelers to share their travel experiences (Zeng & Gerritsen 2014), becoming a privileged strategic channel to access tourism information. Shared travel content, such as photos, reviews, comments and ratings are now playing an increasing role in travelers' decision-making and travel planning. Nowadays, social media tools are commonly used to assess tourism services, throughout different stages of pre, during and post-travel. Sharing social media sites, such as Facebook or Tripadvisor, are customer-driven platforms where potential tourists can rely on others experiences to assist in their decision making in holiday planning (Litvi et al., 2008). In the end, social media offers an alternative web-based tool for tourism companies to provide information, promote products and services, while assisting in customer queries (Leung et al., 2013).

In addition to these benefits, social media also became a research tool for tourism companies. Engaging tools allowed new customer research opportunities, gathering data and consumer insight information through online travel communities and companies websites monitoring. In this sense, it is a strategic offer to tourism companies and partners to promote destinations and services among their target markets (Hays et al., 2012). Ultimately, the image of destination had become a unique selling point to promote tourism. In this sense, Destination Management Organizations (DMOs) and National Tourism Organizations

(NTO's) are the main enablers to promote a structured integrated strategy, acting as image-makers of a destination. DMOs, along with regional and local organizations, should take advantage of online social marketing tools to boost destination image, while managing efficiently customer-social platforms and online promotional channels.

The following study consists of six chapters. Chapter I an introduction of the subject, purpose and research questions for this study. Chapter II is a theoretical literature review of the subject. Chapter III refers to the hypotheses formulation. The research design, sampling and research methods as well as quantitative and qualitative data collection instruments are revealed in Chapter IV. Results and findings are presented in Chapter V as well as hypotheses validation. Chapter VI comprehends the discussion of main results and presents main conclusions of this study. A summary of main research contributions, managerial implications as well as limitations of the research are enounced. At the end, further recommendations for future research are also suggested.

1. Purpose of the study

There have been a significant number of studies concerning the role of social media in travel planning. Being a recent phenomenon in tourism, there is little evidence on its role in the travel context. Also a few studies are based on the different information needs during the whole travel experience (pre travel, during travel and after travel). Most of tourists' consumer behavior models concern the individualistic component of choice, however, external sources such as travel reviews have playing an increasing role in travel decision-making. In addition, most of studies concern only certain social media sites or specific individual characteristics. Although it has been widely used by several tourism companies, there seems to be a research gap regarding its applications in tourists' travel planning. In this sense, this study addresses the main issues of the social media usage by tourists and companies, comparing both tourists' travel planning behavior with the quality of DMOs promotional initiatives, while ultimately suggesting new promotional strategies for these organizations. This study will report the types of social media sites and their usage throughout the different stages of the travel process, the role of tourists' individual characteristics and trip characteristics and the importance of travel information sources.

2. Objectives and Research Questions

The current study has the following research objectives: (1) describe the tourists travel planning process and information search behavior; (2) understand the relationship between

tourists' characteristics (gender, age, level of education and income) and the importance given social media in travel planning; (3) investigate the influence of trip characteristics (purpose of the trip, duration of the stay, type of visit and travel accompany) and the importance given to social media in travel planning; (4) assess the content of social media sites (5) analyze the influence of using social media as an information source in holiday plans and destination image; (6) analyze the current online marketing strategy of Portuguese DMOs; (8) suggest potential solutions for DMOs to increase the use of social media and increase destination visibility.

In this sense, the research questions are:

1. What are the most relevant information sources in tourists travel planning?
 - a. Which factors are relevant in the importance given to different travel information sources (tourists and trip characteristics)?
 - b. What is the importance of online travel sources, namely social media, in travel planning, compared to others?
2. To what extent and for which purposes are social media sites used in tourists travel planning?
 - a. For what purposes is social media used throughout travel planning stages (pre, during and after travel)?
 - b. How do social media content influence tourists' holiday plans and destination image?
3. What is the role of DMOs in destination promotion?
 - a. How important are DMOs online sites in tourists travel planning?
 - b. What is the current tourist perception of Portuguese DMOs sites' content and site features?

Chapter II Literature review

This chapter presents an extensive literature review on social media and tourism subjects. The following chapter is organized in four topics: tourism industry, tourist travel planning, digital marketing in tourism and Destination Management Organizations. Firstly, initial concepts of tourism and tourism activity are explained based on several references in the field as well as an outlook of the industry in the world, and more particularly, in Portugal and Lisbon. Secondly, travel planning behavior is analyzed through different conceptual models as well as information search strategies. Destination image was also included in this topic, presenting different models of destination image formation, and how information search and sources could influence the image of a place. Thirdly, the following topic features present literature related with digital marketing and the different types of online information sources used in travel planning. A further topic presents current literature on social media concept, compiling the most important social media platforms used in travel planning and tourism, enhancing its role and impact on tourism providers and travelers. The last topic focuses on the concept of a Destination Management Organization (DMO), providing literature on its role and influence in tourism activity. Furthermore, this topic refers to the two existent Portuguese DMOs responsible for the online promotion of the city of Lisbon.

1. Tourism industry

1.1. Concept of Tourism

The concept of tourism has been widely discussed in literature. Although tourism has been gathering attention in several fields of study, it appears there is not a consensual agreement regarding its definition (Darbellay & Stock, 2011). Due to its complexity, tourism is often regarded as a broad concept and, in some cases, overlooked by its meaning. Several definitions have been suggested to address this concept in a linear way. Hunziker and Krapf (1942:21) have firstly introduced the concept of tourism mobility as a “set of relationships and phenomena which arise from sojourn of strangers to a place if through the sojourn no establishment for paid work is founded”. Although this definition was accepted, it did not differentiate tourists from excursionists neither considered the relation with tourism suppliers. Notwithstanding, tourism has evolved to a broader significance in other fields. The multidisciplinary aspect of tourism had led to the definition of tourism as an industry. McIntosh and Goeldner (1986:6) stated tourism is “the sum of the phenomena and relationships arising from the interaction of tourists, business suppliers, host governments,

and host communities in the process of attracting and hosting these tourists and other visitors”. In addition, the same authors stated tourism is based on a set of interactions between tourists, service suppliers, governments and host communities, in order to attract and welcome visitors. Smith (1988) has also suggested a supply-side definition, where tourism facilities could serve only tourists or both residents and tourists. Finally, Cunha (1997) highlights the importance of tourism as a service industry aimed at satisfying the needs of visitors.

Among all, the most consensual and broad usage comes from United Nations World Tourism Organization (UNWTO, 2013): “tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes”. In addition, tourism corresponds to people mobility’s should be between twenty-four hours but less than one consecutive year (UNWTO, 2013). The spatial aspect of “usual environment” is often used in literature to differentiate tourism activities from daily ones. It appears the boundaries of this concept have not yet very clarified among researchers and public organizations, leading sometimes, to a less accurate account of tourists. Furthermore, it appears there are still several gaps within these frameworks in terms of how tourism organizations influence tourists, their impacts on travel behaviors and perceived destination image. Tourism organizations are a core part of the tourism system although their relation with tourists appears not to be fully explained, as well as the impact of the local community’s social and cultural aspects.

1.2.Characterization of tourism activity

Tourism represents one of top global industries in the world economy. According to World Travel and Tourism Council (WTTC) in 2013, the tourism activity represented 9,5% of GDP worldwide, 8,9% of total employment and 5,4% of total exports. Apart from representing one of the most prominent industries, it also presents positive growth prospects, which exceed other key sectors. It is expected that travel industry will increase steadily in the next decade, rising 10,3% of total GDP in 2024, higher than the 3,6% average annual growth for the total economy (ITB World Travel Trends Report, 2013).

Throughout the years, the tourism activity has experienced a continuous growth. The advent of low cost airline carriers, along with the propagation of tourism suppliers offer and a higher propensity to travel have been determinant to international travel in recent years. According to UNWTO (2013), international tourist arrivals grew by 5% worldwide, reaching

1087 million arrivals in 2013. Arrivals in Asia and Pacific grew by 6%, followed by Europe and Africa, both 5%, Americas by 3% and same as 2012 in the Middle East. Emerging markets, such as Asia, Middle East and Latin America, have been experiencing a strong growth in recent years with top leading positions in terms of outbound tourism.

In this sense, several destinations are now taking top positions, which previously belonged to Europe and North America. In terms of tourism source markets, China is top leader in international tourism spending, with \$US 129 billion in 2013. Facing the increasing competition from emerging competitors, Europe has been losing travel market share although it still shows consistent outbound tourism. Outbound trips grew by 2,5% from January to August 2013, according to ITB World Travel Trends Report (2013). Russia was the main European source market leader, with a 12% increase in outbound trips, followed by France (5%). Other countries, such as Spain (-4%, compared to previous year) and Italy (-5%) were affected due to their economic context. In addition, overnight stays increased by 2% and spending by 1%.

1.2.1. Tourism industry in Portugal

Tourism industry is one of the most important sectors in Portuguese economy. According to World Travel and Tourism Council (2015), Portugal is one of the countries where tourism contributes the most to the economy, representing 6% of national GDP in 2014 as well as 7,4% of employment as a direct contribution. In addition, its direct contribution is expected to grow 3,1% and visitor exports 2,2% by 2015. Concerning the importance given to the tourism sector, Portugal was ranked 20th position in terms of competitiveness, and 5th within the Mediterranean countries (World Economic Forum, 2013).

Even though Portugal has experienced high growth rates in recent years, it is still behind other small European nations. Countries as Georgia and Belarus (+15%) have registered an exponential growth in terms of arrivals in 2013, compared to Portugal average performance (+8%) (UNWTO World Tourism Barometer, 2013). Notwithstanding, Portugal still maintains a reputable position among its competitors. Portugal ranked 35th position in international arrivals in 2011. In terms of international tourism receipts, Portugal was ranked 26th worldwide in 2012. In Europe, Portugal has climbed up to 12th position, with a share of 2,44% of total tourism receipts. Southern and Mediterranean countries represent 38% of total tourism receipts in Europe, whereas Portugal was ranked 6th in 2012, growing +5,6% than the previous year. Although this is a positive trend, other countries such as Egypt and Croatia are

growing steadily, which may compromise its position. This also suggests tourists are spending more within less days of visit, which increase the importance of city breaks and shorter trips (Turismo de Portugal, 2013).

As a destination, a greater part of tourism demand in Portugal is external source markets (69% of total overnight stays). Portugal is still highly dependable on a small number of external markets, concentrating more than 64% of overnight stays in five markets: UK (24%), Germany (14%), Spain (11%), France and Netherlands (both 8%). In terms of tourism poles, Algarve (40%), Lisbon (26%) and Madeira (18%) are the most representative regions of overnight tourists (Turismo de Portugal, 2012). Low cost carriers had a great impact in international tourist arrivals. Low cost flights increased by 4,6% compared to only 2,8% of regular airline companies in 2012. Charter flights, on the other hand, have been decreasing significantly. In terms of tourism accommodation, it is stated that over 80% of total number of beds is concentrated on four regions (North, Center, Algarve and Lisbon) as well as 81% of total tourist accommodation properties. Both Algarve and Lisbon have registered more than 60% of total overnight tourists, showing the high concentration of tourism activity within these regions. In addition, the average number of nights in these regions is three (Turismo de Portugal, 2012).

1.2.2. Characterization of tourism activity in Lisbon and visitor profile

The city of Lisbon is one of the most visited regions in Portugal, being second in terms of tourist overnight volume after Algarve (WTTC, 2012). According to Turismo de Portugal (2012), Lisbon presented 9,4 million overnight stays in 2012 (+2,2%), where external markets represent 74% (+8,2%). Spain (15%), Brazil (10%), France (10%), Germany (9%) and UK (7%) represent the main tourism source markets, where France and Brazil registered the most significant growth rates (+16,2% and 12,1%, respectively). According to a survey conducted in 2013 by Turismo de Lisboa (Inquérito Motivacional 2013 – Turismo de Lisboa), the majority of international tourists travelled to Lisbon for leisure (69,5%), followed business purposes (19%). On the other hand, national tourists have visited Lisbon for leisure as well (38,9%) yet with a high incidence in business (36%). Although leisure tourism still accounts for the majority of foreign tourism demand motivation, there has been a continuous growth of business and Visiting Family and Relatives tourism (also known as VFR tourism).

In terms of product segmentation, Lisbon offers a wide array of tourism products. Most of foreign visitors usually opt for city breaks (50,4%), followed by Meetings and Incentives

(MI). UK/Ireland (62,3%) and US (62,2%) are the most representative markets in terms of city breaks, while Portugal itself still is the most prominent country in MI segment (20,7%), followed by France, Italy and US (Turismo de Lisboa, 2013). Tourism demand in Lisbon is also marked by seasonality, which is more noted in foreign than domestic tourist overnights. Spain still dominates Lisbon tourism demand due to geographical proximity, even though it has registered a slight decrease in 2012. While Spain market demand is more prominent in high season (40%), other countries such as Germany (43%), UK (40%), Brazil (40%) and France (37%) are more concentrated in medium season in Lisbon (Turismo de Portugal, 2013).

The typical visitor to Lisbon is aged between 36-55 years old (60,2%), although younger segments (18-35) represent a significant part (21%) (WTTC, 2012). Youth tourism is currently growing at a faster pace in the city, with the opening of budget hostels, along with an increasing airline connection to other European countries through low cost carriers. In addition, they tend to have a good educational background (secondary or higher education) and often travel with friends or family (Turismo de Lisboa, 2013). In terms of travel planning, foreign tourist preferred to organize the trips by themselves (53,4%), with a less use of travel agencies and other intermediaries. However, for business tourism, travelers have organized through their company but also through the web, similar to national travelers. This might be due to the increasing use of Internet as a booking channel and emergence of online travel planning platforms. In this sense, 33,7% of total tourists (national and foreigners) have used the Internet to book accommodation and 20,9% to collect information for their trip (Turismo de Lisboa, 2013). It could also be noted a significant higher usage from leisure tourists with other motivations. Italy, Benelux and France are the most Internet users to book accommodation while UK/Ireland, Benelux and US use online tools to search about information regarding Lisbon. While online is steadily growing, some markets like US and Scandinavian still rely on travel intermediaries to assist in their travel planning, mostly due to a lack of knowledge of the destination and geographical distance (Turismo de Lisboa, 2013).

2. Tourist Travel Planning

2.1. Tourist's travel consumer behavior

Tourism products are widely known for their intangible nature, lacking a pre experimentation of the product and commonly involving high levels of expenditure and involvement (Gretzel & Yoo, 2008). Swarbrooke and Horner (1999) have identified the

characteristics of tourism products which affect consumer behavior. The author states that, being intangible, tourism products represent a higher risk for consumers. As most of tourists' products are inseparable and dependable on each other (e.g. a hotel in a remote location and transportation to get there), consumers may change their behavior according to experiences. At the same time, these products are heterogeneous, whereas consumers find difficult to judge its quality; and finally, they are only experimented after purchase, lacking ownership and pre assessment (Swarbrooke & Horner, 1999).

Research has been focused on macro analysis of consumer behavior, concerning tourist's needs and outcomes on different frameworks. Engel et al. (1995) have considered consumer behavior as a decisional process, highlighting the psychological consumer process before and after purchase. Also Berkman and Gilson (1986) claimed the importance of the environmental influence and individual difference in explaining the consumer behavior. Moreover, Solomon (1996) has suggested consumer behavior is an ongoing process whereas consumer needs and wants and marketers role interact in his model, suggesting an interdependent process between these two parties during decision making process, highlighting the 'exchange' relationship. The author introduces the idea that consumers are able to make purchase decisions in groups, and not only as individuals. Additionally, organizations can be involved in the buying process and adapt the product throughout travel planning phases. Ultimately, it reflects the increasing role of tourism organizations and companies in defining the product and consumer's product co-creation (Minazzi, 2014).

Travel planning process is a long-term process, which tends to involve several problem-solving issues (Decrop & Snelders, 2004). Several models are been suggested to explain the tourist behavior in travel planning and destination choice (Pan & Fesenmaier, 2006; Fodness & Murray, 1999; Andreasen (1965); Engel et al. (1995). Most of these models base their premises in general consumer behavior models, adapted by tourism researchers, although the majority lacks a comprehensive analysis of the tourist behavior pattern in the decision-making process, focusing on individual characteristics rather than group and external influences. Gilbert (1991) has suggested a model involving both internal and external influences in consumer behavior. Hence, decision-making relies not only in intrinsic personal characteristics such as perception and personality, but also external influences from sociological relationships and family interests (Gilbert, 1991). Furthermore, Luo et al. (2004) state the search of information is influenced by the perception of the environment, the importance on the product and the risk perceived. In this sense, decision-making models in

tourism may be misleading, as available information is often incomplete and decisions are influenced by external options and perceptions, which may be biased. Furthermore, other models assume decision making and purchase are a rational process rather than a adaptive process due to the nature of the holiday product (Swarbrooke & Horner, 1999).

In this sense, researchers have adopted several approaches to better unveil the tourist information search behavior. According to Swarbrooke and Horner (1999), several factors influence holiday decisions (Figure 1 - Appendix 2). Travel planning involves *motivators*, and personal and external *determinants*. While *motivators* are leading factors by which consumers are persuaded to wish a certain product, *determinants* are personal or external variables, which ultimately decide to purchase the desired product. Travel planning appears to be thus a complex process due to high levels of insecurity in the purchase process, which significantly affect their behavior (Swarbrooke & Horner, 1999).

According to the consumer behavior literature, the traveler buying process comprises five stages: need recognition, information search, evaluation of alternatives, purchase decision and post purchase behavior (Kotler & Armstrong, 2010). Other studies are also based on travel planning approach, suggesting on a temporal three stage model (pre, during and after trip) (Cox et al., 2009; Engel et al. 1995) or on psychological traces (anticipatory, experimental and reflective) (Jennings, 1997). While decision-making approach is based on a single purchase, travel planning theory models tend to be more complex and interrelated (Minazzi, 2014).

Cox et al. (2009), along with Mathieson and Wall (1982), have suggested a general consumer behavioral model adapted to tourism (Figures 2 and 3 - Appendix 2). The model comprises the three main trip phases (pre, during and post trip) and five different stages of travel decision-making process. Travel planning starts by recognizing the need for travel, which can be an internal or external source. After recognizing the need to travel, the amplitude of choices will lead to a greater number of information sources, both personal (friends, family, relatives) and non personal (online and offline commercial sources) (Kotler & Armstrong. 2010). After carefully reviewing information on the destination and evaluating alternatives, purchase decision occurs just before during trip phase. After travel experience, post trip phase involves post purchase evaluation, particularly travel overall satisfaction and reviewing (Cox et. al , 2009). However, purchase decisions might be affected by risk, external factors, attitudes of family or others, or situational factors can even persist after purchase (Minazzi, 2014).

Even though this seems a well-defined process, Decrop and Snelders (2004) claim travel planning process may vary. Travelers' personal traits, decision-making contingencies (price, time) and traveler experience could influence decision-making. In addition, these authors state decision-making process should be regarded as an adaptable and opportunistic process, influenced by situational and social variables.

2.2. Tourist's travel information search

Travel information search is a crucial part of travel planning. Understanding tourists' behaviors and information search patterns are relevant for companies to develop effective communication strategies (Pike, 2004). Bearing in mind Cox et al. (2009) travel planning process, travel information search plays a critical role in travel decision-making. Depending on which stage of travel planning process, travelers may use different types of information sources (Cox et. al, 2009). Also tourists may search information in several stages of decision-making process, which may affect decisions before, during or after the trip (Murphy, Mascardo & Beckendorf, 2007).

One of the most recognizable studies in tourist information search behavior is Fodness & Murray's (1999) model. The model highlights the different information search strategies (*spatial, temporal and operational*) and search outcomes, along with the influence from external contingencies and tourists characteristics (Fodness & Murray, 1999). Firstly, information search strategies are related to the contribution of information search in overall decision. *Spatial* refers to the origin of information, which can be internal (own experience) or external (external information sources). Internal sources are much dependable on the cognitive system (Hansen, 1972) while external search is based on media and other independent sources (media, guidebooks). Although different, internal sources are likely to be influenced by external ones through tourists' previous knowledge (by own experience, media or other external source). In addition, if internal sources provide enough information, tourists will tend not to use external ones (Fodness & Murray, 1999). The second dimension, *temporal*, may be pre purchase (if information search is aimed at an actual purchase) or ongoing (if information search is for future purchase decision). According to Fodness & Murray (1999), decisive search are core information sources to decision-making while contributory search are combined sources, which will support to final decision.

Furthermore, Fodness & Murray (1999) have identified three other components, which influence tourists search information: tourists' characteristics, contingencies and search

outcomes. Tourist characteristics include *family life cycle*, and the role of family decision in information search, and *socio-economic status*, namely demographic and educational backgrounds are determinant in travel search behaviors. Contingencies refer to external circumstances whereas *situational influences* and *product characteristics* are the main dimensions considered. In one hand, *situational influences* could report to the nature of decision-making (e.g. purpose of visit) or traveling party (e.g. traveling alone or with family), and they are relatively independent from *product characteristics* (Fodness & Murray, 1999). On the other hand, *product characteristics* relate to the mode of travel and the purpose of the trip (leisure, business or other). The latter assumes to be the most relevant dimension to explain the information search behavior, which may also define the mean of travel, the nature of decision making and the traveling party (Fodness & Murray, 1999). The last group is search outcomes, which refer to *length of stay*, *the number of destinations or attractions visited* and *travel-related expenditures*. Fodness & Murray (1999) state these behavioral factors are positively correlated to the level of information search and vice-versa. Hence, he suggests a higher level of travel information search could explain a higher length of stay and the number of destinations and attractions visited. Also, the higher the travel-related expenditures (expected), the higher the levels of information search.

Even though this model illustrates the main dimensions concerning travel information search in travel planning, it does not refer to information search after purchase (Fodness & Murray, 1999). It has been suggested that the information obtained after purchase is increasingly important for both tourists and companies, as a way to assess the quality and accuracy of the information provided in different sources. Moreover, Choi et al. (2007) claim that travel information and decision making is a continuous rather than a rigid process. In this sense, the information search is an ongoing integration of new information throughout the travel planning stages, which will be further analyzed.

2.3. Information search behavior and destination image

Tourism destination image (TDI) is a widely discussed subject in tourism literature. The subject of destination image has been analyzed through different scopes, being closely related to individual's perceptions and consequent destination choice. Most of studies in destination image concern the relationship between destination image and destination tourist choice (Baloglu & McCleary, 1999), although most of research lacks a conceptual framework of this process.

Image seems to represent a vast dimension, with several applications in various fields, particularly, tourism. In the context of travel planning, the image of a product or a destination is complex to determine. Fridgen (1987:102) stated image is a “mental representation of an object or place which is not physically before the observer”. Additionally, Assael (1984) claimed the perception of a product or place is a result of the information process from several sources. The lack of pre-experimentation and evaluation restricts the perceptual and cognitive impressions, whereas own experience is determinant when assessing a destination. However, in the absence of previous visit, it appears external information sources (word of mouth, reviews, media, etc.) also contribute to explain the genesis of TDI (Baloglu & McCleary, 1999). In this sense, it appears travel information sources might explain, not only the travel search behavior but additionally contribute to their perception and image of the destination. Several definitions of destination image have been suggested in literature. Gallarza et al. (2002) have compiled the most important research on the concept of destination image, providing review of literature based on four topics. Destination image has been defined as the group of impressions, knowledge, prejudices and emotional feelings about a certain place or object (Lawson & Baud-Bovy, 1977).

Even though research on TDI has been consistent in the recent years, some issues arise. It appears there is no common agreement in the process and nature of destination image formation. One of the reasons is the complexity of tourism characteristics and its multidimensionality (Gallarza et. al, 2002). The intrinsic touristic products intangibility is a barrier to pre-experimentation, which restricts image assessment (Fakeye & Crompton, 1991). In addition, tourists’ impressions vary, increasing subjectivity in addressing tourists’ needs in destination marketing (Gallarza et al., 2002). Most of studies on TDI have scarcely considered influencing factors in destination image process formation, focusing on how the image is actually constructed rather than the influence on the actual trip (Baloglu & McCleary, 1999). Only few papers have focused on assessing destination image in a specific travel context. Research has been centered on theoretical models of destination choice and image, marketing strategies and tourist perceptions, yet lacking the influence of different factors in portraying an image of a certain place or site. Hence, several factors determinant in defining a concept of destination image will be analyzed, namely, the information sources used in travel planning.

From a tourist’s perspective, it appears paramount to understand which factors influence destination image and impact destination choice. According to Baloglu and McCleary (1999), there are three driven forces in absence of previous visit: socio

demographics, tourism motivations and information sources. In addition, destination can be assessed by two levels: perceptual/cognitive and affective. Baloglu and McCleary (1999) have suggested a destination image formation model, which identifies the main influencing factors in image construction (Figure 4 - Appendix 2). These authors considered destination image is affected by two main sources: *stimulus factors*, derived from external stimulus or previous experience, and *personal factors*, namely social and psychological factors. Hence, these factors will affect the perceptual/cognitive impressions about a destination, as well as the feelings about it (affective), resulting in an overall image. In addition to these, motivations have also been included as major factors. Within external stimulus, information sources are pointed to be one of the most determinant factors in influencing the image perceived. It is suggested some factors, such as the variety and type of information sources will impact positively the destination overall image, contrarily to others, particularly, age and education (Baloglu & McCleary, 1999).

The role of information sources in portraying a destination is suggested in several researches. Several models emphasized the importance of information sources in image formation and destination choice. Woodside and Lysonski (1989) stated information sources will influence the perceptual and cognitive parts of image (the set of beliefs and knowledge of a product or place) yet not the affective. The perceptual/cognitive assessment depends on external variables, which can be symbolic (promotion through media) or social (through friends and relatives, WOM, etc). Furthermore, Gartner and Hunt (1987) and Hoolbrook (1978) also claimed the influence of external stimuli (namely information sources) in the formation of cognitive but not the affective part of the image, stating the perceptual/cognitive dimensions vary according to the variety and type of information used by tourists. In this sense, the type of image will depend on the type, quality and quantity of information. Ultimately, the perceptions over destination attributes will compose an overall image (Gartner & Hunt, 1987).

Regarding the travel planning process, little is known about the destination image formation when visiting a destination. Most of research focuses on post visit images, after the travel experience, while the process of destination image formation at pre travel stage is scarce. According to Baloglu and McCleary (1999), within external sources, three types of information sources are defined: induced, autonomous and organic. While induced sources have a commercial role (e.g. produced by media), autonomous are considered unbiased and

non-commercial (e.g. destination organizations). Lastly, organic sources derive, for example, from friends and relatives.

Travel information search is a staged-process, divided in pre, during and post travel. Gunn (1972) suggested a model of destination image formation defined by seven phases: (i) collection of mental images about travel experiences; (ii) adjustment of the initial images by additional information; (iii) decision to take a trip (iv) travel to the destination; (v) participation at the destination; (vi) return home; (vii) adjustment of images based on the travel experience. The type of information sources used may vary throughout travel planning stages. It is argued the image creation during pre travel stage is crucial to destination choice (Gunn, 1972). It is also stated the more and diverse information sources tourists use will positively affect destination image, being the word of mouth recommendations from friends and relatives the most important source in creating destination images (Baloglu & McCleary, 1999). Also in their study about the types of online information sources in destination image formation, Mariussen et al. (2014) also found friends and organic (friends and relatives) and autonomous sources were the most used in pre travel stage. Online sources are also emphasized among the most used sources although not individually considered. Furthermore, destination image will depend on pre and post search image. Mariussen et al. (2014) found that post search image was slightly higher than pre search. This fact was due to the contribution of travel sources to the cognitive image of the destination at pre search stage, and, after the search, a higher knowledge of destination attributes will provide higher destination image accuracy. This reflects the importance of conducting destination image assessment after visiting the destination, which will be further applied in this study.

3. Digital Marketing in Tourism

3.1. Digital Marketing definition

Digital marketing is a component of traditional marketing which involves any form of online channel to the consumer through websites, social networks, blogs, email, database, mobile or TV (Chaffey et al., 2006:252). In addition, the same authors state Internet marketing is simply defined by “achieving marketing objectives through applying digital technologies”. Bernal (2010:2) has shown the difference between Web 1.0 and Web 2.0 in his work. According to the author, Web 2.0 refers to “a set of enabling technologies that enable companies to reach and provide services to end users in exciting new ways”. While Web 1.0 is a unidirectional model, focused on delivering products and maintaining the website, Web

2.0 emphasized different business models and deliver services in different ways, instilling users to participate and interact with the website, creating a collective community (Bernal, 2010). Hence, Web 2.0 not only provides data in a dynamic form, but also improves user interface and interaction with content creators.

This new form of marketing strategy claims to have positive impacts in the travel industry. Digital technologies reduce the role of an intermediary agent, allowing companies to pass on the benefit to customers (Pinkley & Urban, 2003). The direct sale of travel products was also influenced by the growth of independent travel through Internet. According to Euromonitor (2014), global travel and tourism sales in Europe accounted to US\$ 2,260 billion in 2013, whereas online travel sales have represented US\$590 billion. In addition, Internet marketing is supported on company's website along with online promotional tools such as search engines, email marketing, and partnerships with other websites, reducing costs when compared to traditional marketing techniques (Chaffey et al., 2006). Moreover, social media and online communities provide direct feedback of the company, which will benefit as well. This benefit trade-off is increasingly leading most of companies to pursue a higher online presence. Although this seems highly beneficial, in order to gain competitive advantage, establishing their presence online should follow an integrative marketing strategy, combined with traditional marketing as part of multichannel marketing approach, where social media networks should play a decisive role (Kierzkowski et al., 1996).

3.2.Types of user generated content sites (UGC sites)

Nowadays, there is a wide variety of online platforms for content, media and opinion sharing, with multiple purposes and users. According to Bernal (2010), social networking sites commonly involve the creation of a virtual community where users can share, discuss and collaborate about topics of common interest. Depending on each business, online communities are a critical part of Web 2.0 approach, suggesting new business models for companies to reach consumers. Table 30 (Appendix 1) shows the different types of UGC sites and examples of most popular UGC platforms.

3.2.1. Social media

Social media is commonly discussed subject in marketing literature although its impact on decision making is not very well known. Most of studies focus on quantitative analysis (numbers of website visitors, pay-per-click, number of reviews, number of interfaces), lacking a comprehensive study of strategic positioning and creation of online platforms. Considering

social media is a relatively new subject in literature, it appears there is also limited evidence regarding its financial returns (Leung et al., 2013). Another discussing issue in social media is traveler's perceived trustworthiness in online information, which tends to be overlooked in literature. Furthermore, social media content evaluation and strategy are scarcely researched, particularly in tourism field, demanding a more comprehensive study of these same factors.

3.2.1.1 Social media definition

There is a wide range of definitions attributed to this concept. Ryan and Jones (2009:152) have referred to social media as an “umbrella term for web based software services that allow users to come together online (...)”. Kaplan and Haenlein (2010:61) emphasized the functionality of social media as an information tool, defining 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 of user-generated content”. Also, Poytner (2010) and Zarrella (2010) have compared one-to-many broadcast technologies in traditional marketing (e.g. television and newspapers) to many-to-many model common in social media, emphasizing the possibility of users to create and edit their own content and receive feedback. Lastly, Scott (2010) states the term social media refers not the technological tools people use to communicate but rather how to use it in communicating among them.

3.2.1.2. Social media in tourism (from supplier's perspective)

Social media plays a critical role in the tourism industry, particularly in the flow of the information search, tourism promotion and decisions making behaviors (Fotis et al., 2012). Travel information searches in social media technologies can, therefore, provide reliable information concerning destinations, activities and appropriate price information in order to identify the needs, wants and demands of tourists. Recent developments include text messages, pictures, videos in real-time and word-of-mouth through recommendations, which stimulate travelers interest and engagement to interact more often and rely on others user's opinion (Zeng & Gerritsen, 2014). One example given by Leung et al. (2013) are travel blogs. More than information sources, blogs also enable to connect customers and companies, discussing relevant topics on products services offered while identifying unsuspected features. As a matter of example, some hotels have encouraged visitors to write comments on their hotel blogs (e.g. Marriott, Hilton, Starwood Hotels), establishing a communication channel with the consumers and receiving feedback about their services. Distributing hotel room inventory on Tripadvisor is another strategy used to generate revenue through direct links

(Leung et al., 2013). Using social media as a distribution channel has also shown to be highly beneficial for travel suppliers. According to Leung et al. (2013), attract demand via social media (indirect distribution) decreases distribution costs. Although commonly associated to a marketing and information platform, social media ultimate goal is to convert website visitors into actual consumers. In addition, user-generated content (UGC) can also be used to develop push strategies by analyzing comments in online communities such as TripAdvisor, and through target specific needs of consumers and establish appropriate pricing strategies (Noone et al., 2011).

Social media is a common used source not only for consumers to obtain information but also to generate their own content to intercommunicate with others. A study conducted by Statista (2015) shows user generated content is one of the most used sources (50%), followed by opinions of friends, colleagues or relatives (43%). Print resources are still predominant among the most preferred sources (44%) due to their tangibility, easiness of use and reliability. Most of respondents also stated they used social media (37%) and DMO websites (30%) to plan their trip, in contrast with just 12% using a travel agent. Concerning the use of online travel sources, 42% of US leisure tourists have used travel review sites in travel planning (business tourists represented 36%). In addition, 25% of leisure tourists have used social media sites/apps while 30 % of both business and leisure travelers have used destination specific sites/apps (Statista, 2015).

The level of trustworthiness and reliability are also primordial among users. According to Simms (2012), more travelers rely on existing information when visiting a destination for the first time and were likely to search for user-generated content (UGC). It is paramount that online platforms, such as Facebook, Twitter or Tripadvisor should be both accurate and reliable, with quality content platforms, in order to attract potential tourists. Moreover, along with traveler's word of mouth, it is perceived more trustworthy than information sourced by the destination of tourism service provider (Fotis et al., 2012; Yoo et al., 2009). Other studies in current research literature concern the level of awareness of different social media tools. According to Leung and Bai (2013), the relationships between motivations, social media involvement and revisit intention were no different between Facebook and Twitter. Bearing this mind, the same authors suggested tourism suppliers, such as hotel managers, could apply the same marketing strategy in different social media channels. It seems therefore social media involvement could boost traveler's intention to revisit pages.

Even though social media benefits in tourism are discussed in most of marketing studies, recent issues have been emerging. The existent of multiple online platforms for tourism consumers might be positive in a way, although current product search engines might fail to include diverse information across different social media (Zeng & Gerritsen, 2014). In addition, the propagation of negative comments and feedback could degenerate company's reputation in a long-term. While social media might be a valuable strategy to attract new customers, attract feedback and instill brand loyalty, it might also affect customer trust and market value of the brand if not used properly (Salkhordeh, 2009).

3.2.1.3. Social media in tourism (from consumer's perspective)

After looking at social media literature from a suppliers' perspective, we may look at its importance in travelers' planning process. Since the benefits and quality of the product cannot be evaluated before the product is consumed (Schmallegger & Carson, 2008), promotion is paramount to instill customer confidence. In addition, as tourism products/services tend to be differentiated, highly priced and with a high degree of involvement, travelers tend to collect different sources of information before decision making in order to minimize risk of disappointment (Leung et al., 2013).

Nowadays, travelers are active participants in the creation, production and distribution of travel information and products. Following previous models of travel planning, Cox et. al (2009), at an early stage, consumers use a wide array of sources to understand tourist products. Apart from official website and tourist suppliers, customers tend to rely on family and friends recommendations, fellow consumers and Word Of Mouth (WOM) (Schmallegger & Carson, 2008). In this sense, due to a lack of commercial interest from tourist suppliers, WOM is seen as a more reliable source, whereas user generated content (UGC) provides detailed and experimental information (Litvin et al., 2008). Although UGC is highly recognizable for tourist reviews, it tends to be less trustworthy than common WOM, due to the fact that the message could be created by an anonymous user, and thus could be created by self or commercial interests (Leung et al. 2013).

Several researches confirm the impact of social media in consumers travel planning process. Cox et.al (2009) found that UGC was mainly used at search stage of travel planning (based on a survey of 12,544 respondents travelling to Australia). At during-trip stage, users usually post and rate places of interest, hotels, attraction and restaurants and bars. The content shared on online communities and blogs are presented in a narrative form, which could lead to

intention to consume the product (Leung et al. 2013). On the other hand, Fotis et al. (2012) and Murphy et al. (2007) revealed that social media is mainly used after holidays. Sharing life experience, social interaction and traveler's personality were found to be important motivator factors to post-travel UGC (Pan et al., 2007; Yoo et al. 2011). At the post-trip stage, the creation of UGC will reflect the overall experience or product based on a fulfillment of expectations and desires. It is therefore suggested the role of personality and personal traits would lead to increase or inhibit the creation of UGC.

Even though UGC could impact consumers' decision, it is still determined by certain features and socio demographic characteristics of consumers. Different users of social media have different impacts on potential followers and tourists (Zeng & Gerritsen, 2014). Online social media comprises a wide range of users with different behaviors in using online tools. While the content of UGC could represent a review of previous travel experiences, it also represents a subjective perspective of the product or service detained, which may be influenced by age or purpose of travel. McCarthy (2012) revealed business and leisure travelers act differently in travel information search. Also Rodriguez (2009) reveals that younger users are more influenced by UGC when compared to older generations. Other researches (Cox et al, 2009; Chung & Buhalis, 2008; Luo et al., 2004) suggest also younger generations of travelers tend to publish their UGC on their own social media platform rather than a supplier website. Hence, it appears there are differences in UGC creation and usage which will be further analyzed.

4. Destination Management Organizations (DMOs)

4.1. Definition of DMO

According to UNTWO (2015), a *Destination Management Organization* (DMO) is an official entity which includes stakeholders and industry professionals, aiming at fostering potential partnerships between tourism industry participants and ultimately build a collective vision of the destination. Apart from its promotional role, the main objective of a DMO is to develop and promote the destination through the coordination and management of core activities, such as financial funding, strategic planning, marketing, decision making and tourism product development in a country or specific region (UNWTO, 2015).

DMOs could also be classified as general service tourism suppliers in the destination, providing a range of services within the destination. DMOs play a central role in tourism stakeholder network in destination management, which includes tourists, tourism sector

organizations, host communities, environment and government. Traditionally, DMOs are commonly governed by the public sector and government agencies, although other entities have appeared in recent years (Morrison, 2013). As active participants in destination promotion, these organizations could be classified at three different geographical levels: national, regional and local. These are official organizations in charge of national marketing campaigns for inbound tourism internationally. Also national DMOs (or Tourist Boards) are generally governmental entities, acting as both promoter and regulator of tourism activity nationwide (UNWTO, 2007). Regional and local entities are more centralized centers where these organizations have a more local impact, either in regions or cities and villages. Regional and local DMOs also tend to be run by governments, statutory bodies or non-profit schemes (Morrison, 2013)

4.2. The role of DMOs in online tourism promotion

DMOs play a relevant role in tourism development and promotion areas. Traditionally associated to destination marketing, the role of a DMO has progressed to other fields. Apart from the marketing activities and its implementation, DMOs are now responsible not only for promotional themes, but also to be strategic leaders in destination development, to coordinate destination management activities and foster tourism development. Roque and Raposo (2012) state tourism is a sector in a transition stage, whereas DMOs are becoming destination strategic players, instead of marketing promoters only. In addition, DMOs are becoming more involved in the tourism practices and catalyzing tourism development (Presenza et al., 2005). According to UNWTO (2007:9), promotion “must attract people to visit in the first place; creating a suitable environment and quality delivery on the ground will ensure that visitors expectations are met at the destination and that they then both recommend the destination to others and return themselves on a future occasion”. Table 31 (Appendix 1) summarizes the various roles of DMOs.

DMOs strategy appears to go beyond marketing, focusing on managing and assuring destination image on a long-term basis. Marketing campaigns and destination promotion are still the key roles of DMOs. These entities have been long recurring to traditional marketing tools such as campaigns, events and international trade fairs. It appears destinations could take advantage of other marketing techniques to market destinations in a distinctive way, where online marketing could play a prominent role. Although it has been currently used by several tourism organizations, it appears there is lack of practical demonstration of online marketing tools in tourism studies and in destination management, in particular social media.

Stankov et al. (2010) conducted a study of 39 European National Tourism Organizations (NTOs) presence in social media and found that less than half were officially represented on Facebook. Moreover, DMOs do not usually sell products or services to visitors, meaning their marketing effectiveness is not easily perceived. In this sense, DMOs are central communication intermediaries who need to communicate both with external and internal audiences and not just using external marketing (Morrison, 2013).

4.3. Portuguese DMOs

Even though most of national DMOs have different organizational structures, their roles and activities are similar. Morrison (2013) points out the main roles and activities of national DMOs: (i) Tourism legislation and regulations; (ii) Tourism policy making; (iii) Tourism planning and strategies; (iv) Tourism development; (v) Tourism research; (vi) Destination marketing; (vii) Education and training programs; (viii) Quality improvement assurance; (ix) Sustainable tourism. One of national DMOs main strengths is the greater management flexibility in dealing with destination marketing. According to Morrison (2013:28), these are often “governed by independent boards of directors (...), private-sector tourism businesses and non profits” which provides autonomy and independence to manage their policies.

In the Portuguese context, tourism activity is regulated by the government, namely the Ministry of Economy and Innovation (MEI), and internally governed by the Secretary of Tourism. A number of national and regional statutory bodies, such as Turismo de Portugal (TP) and Regional Tourism Boards (*Entidades Regionais de Turismo - ERTs*), along with a number of local and private organizations, are currently responsible to manage tourism promotion, both in Portugal and overseas. In the case of Lisbon, there are two organizations responsible for the tourism regulation and promotion: *Entidade Regional de Turismo para a Região de Lisboa* (ERT-RL) and *Associação de Turismo de Lisboa* (ATL). Considering the importance for national economic activity, the Portuguese government has been fostering development through public and private initiatives, in order to achieve the goals of *PENT* (*Plano Estratégico Nacional para o Turismo*).

4.4. Social media applications for DMOs

Many countries have been using social media to promote their tourism industries although there is still great potential in this field. Social media in destination promotion became highly attractive for the fact that a wider range of content is available online, live time information easily accessible and multiple functionalities that foster interaction between

tourism suppliers and potential visitors (Leung et al., 2013). According to Valls et al., (2013), social media applications could provide a new online strategy, which focuses on establishing an interactive relationship between users and consumers rather than increase sales. Hence, a social media application fosters a relationship between consumers and companies, which could generate sales by simplifying the value chain (Valls et al., 2013). Research evidence also shows the use of social media in tourism marketing differs according to the size of the company as smaller companies tend to have fewer promotional activities than larger ones (Hardesty, 2011).

Social media applications provide DMOs a new implementation in their operations and business models (Zeng & Gerritsen, 2014). One example is Visit Britain. Established in 2003 to promote England to both resident and overseas tourists, the official NTO for United Kingdom works with several organizations, including tourism boards and tourism visitor centers. In March 2010, Visit Britain started a campaign to increase tourism in the UK through its Facebook Page, the “Love UK” Facebook Group. By using geo-targeting and Facebook’s target filtering, it directly aimed at English Speaking countries, along with other potential targets such as college graduates and over 21 years old users. In addition, users with related interests or likes in keywords such as “London”, “travel” or “royalty” were also included in their target. As a result, more than 2,000 people joined its Facebook page in one month and 25,000 people within four months. In the end of 2013, Visit Britain had almost 3 million fans on their Facebook Page “Love Great Britain” (www.visitbritain.org).

Although social applications are increasing DMOs exposure and destination visibility, the use of online platforms might represent some challenges. Munar (2012:1) refers issues may arise between “corporate and social media cultures, innovative communication tools and traditional management structures, poor levels of formalization and the lack of a knowledge base”. It appears the predominance of traditional providers of travel related information such as national or regional tourism organizations are not fully aware of social media benefits in destination marketing, which may delay its full application in the travel industry.

Chapter III Research Hypothesis

In this chapter, research hypotheses will be formulated and the suggested relation between identified variables from literature review will be further analyzed. This study comprises the analysis of travel information sources, particularly social media sites, and their impact in traveler's travel planning behavior. Previous literature was taken into consideration when defining the variables to further explain the role of information sources as well as similar studies in the field. Among the various studies conducted in the area, it appears there are several limitations. Firstly, the majority of studies concerning social media only concern one specific site or a group of specific sites with similar characteristics. Secondly, the wide range of information sources and types of online sites sometimes difficult the analysis of these sources. And ultimately, even though social media is already generalized among travelers, little is known about their behavior and at which stage social media influences travelers' decision making. Furthermore, one of the study's goals was to understand and provide accurate information on the profile of the social media user in the travel context. Most of demographic and socio economic variables were extracted from previous studies in travel planning as they were considered the most relevant to define the user profile as well as trip related characteristics. Demographic and socio economic variables comprised gender, age, level of education, level of income and country of residence, while trip characteristics featured length of stay, purpose of visit, number of visits, and travel composition. In total, six hypotheses will be tested, including eight sub-hypotheses, in a total of eleven.

The relationships between tourist individual characteristics and information sources have been discussed in several researches. The majority of studies concern the relationship between the frequency of social media usage and demographic and socio-economic variables although in a general travel context. Yoo and Gretzel (2009) have claimed travel social media users are commonly young and have higher incomes, generally more involved in travel planning, using several information sources, and tend to travel more often. Moreover, Moscardo and Beckendorff. (2010) have provided a generational study whereas younger consumers have certain generational traits in travel behavior: typically travel more often, spend more money, use online sources to book their travel, rely more on friends and relatives in decision making, involved in participative marketing such as travel blogs or review sites, and use a wide range of travel information sources rather than sole ones. Lastly, Decrop and Snelders (2004) mentioned traveler's personal traits have a direct impact in travel decision-making. Following this, the aim is to further analyze the following variables (gender, age,

level of education and income) and identify which ones are influencing factors in the importance given to social media and travel review sites in travel planning. While most of studies focus in one particular characteristic or social site, the goal is to understand the impact of overall tourist characteristics in online travel search, which will help to define a profile of the tourists who currently use these sources, and ultimately contribute to build destination marketing strategies for DMOs, grounded in socio-demographic characteristics of travelers. In this sense, H1 is enounced above:

H1: The importance given to social media and travel review sites in travel planning is influenced by tourist's individual characteristics.

- *H1a: The importance given to social media and travel review sites in travel planning is influenced by gender.*
- *H1b: The importance given to social media and travel review sites in travel planning is influenced by age.*
- *H1c: The importance given to social media and travel review sites in travel planning is influenced by level of education.*
- *H1d: The importance given to social media and travel review sites in travel planning is influenced by level of income.*

Previous literature has been supporting the influence of trip related characteristics in tourists' travel information search (Fodness & Murray, 1999; Decrop & Snelders, 2004; Swarbrooke & Horner, 1999; Pan & Fesenmaier, 2006). Past researchers found that trip characteristics were related to information search patterns and ratings (Andereck & Caldwell, 1993) as well as the frequency of travel is determinant in the choice of information sources (Woodside et al., 1987). Also, other factors such as prior experience travel party composition and the presence of friends and relatives (Snepenger et al., 1990; Cox et al., 2009; Fotis et al., 2012) were identified as influencing factors of the travel information search by tourists. In addition, the level of knowledge of the destination (first timer or repeater) (Gursoy & Chen, 2000), as well as the purpose of the trip (Moutinho, 1987; McCarthy, 2012) were also found to be relevant to explain the tourist search behavior. Finally, Gretzel et al. (2006) study also argues that situational needs shape travelers' vacation planning needs. In this sense, it appears trip information, such as the frequency of travel, duration of stay or travel composition could help understand the tourists' information search behavior. In this case, it might explain if social media sites were useful or not in travel planning according to trip related

characteristics. Ultimately, this study will help to understand the use of social media sites in travel planning and their relation with trip-related factors. These are the following hypotheses:

H2: The importance given to social media and travel review sites in travel planning is influenced by the trip characteristics.

- *H2a: The importance given to social media and travel review sites in travel planning is influenced by the duration of stay.*
- *H2b: The importance given to social media and travel review sites in travel planning is influenced by the purpose of the trip.*
- *H2c: The importance given to social media and travel review sites in travel planning is influenced by the level of experience with a destination (first timer or repeater).*
- *H2d: The importance given to social media and travel review sites in travel planning is influenced by travel composition.*

Several researches confirm the impact of social media in travel planning process. Yoo and Gretzel (2008) have argued several information sources are used before the destination is chosen. Cox et.al (2009) found that UGC was mainly used at search stage of travel planning, after the destination has been chosen and before purchase decision. On the other hand, the author mentions UGC sites are little used during and after trip. At during-trip stage users usually post and rate places of interest, hotels, attraction and restaurants and bars, while their usage is less frequent after the travel experience. Also, depending on which stage of travel planning process, travelers may use different types of information sources. Contrarily, Fotis et. al (2012) claims social media and travel review sites are mostly used after the trip to share experiences. Sharing life experience, social interaction and traveler's personality were found to be important motivator factors to post-travel UGC (Pan et al., 2007; Yoo et al., 2011). At the post-trip stage, the creation of UGC will reflect the overall experience or product based on a fulfillment of expectations and desires. In this sense, this study investigates if social media is mostly used before, during or after the trip, and clarifies about the purposes of usage in the different stages.

H3: Social media sites are mostly used in pre trip stage of travel planning.

The content of UGC and the influence in tourist's travel planning has been widely discussed in literature. Within the travel context, most of research has focused the importance of UGC content, the level trustworthiness of UGC compared to other sources of travel information and the impact of UGC content on travel planning and decision-making (Yoo et al., 2009). Several factors affect trust. Bart et al. (2005) claimed online trust is influenced by website and consumer characteristics. In addition, some demographic characteristics also affect trust, such as age and gender (Johnson & Kaye, 2002). Parra-López et al. (2011) revealed the intention to use social media were influenced by the perceived benefits of its usage, namely functional, psychological, hedonic and social, stating trust in contribution of others would promote the usage of social media. Menon et al. (2002) stated online information search behaviors are influenced by trust. Yoo et al. (2009) also found the increasing trust in UGC content will increase its usefulness to tourists, such as finding more information, get more involved in trip planning, evaluate better alternatives, get better value for money, among others. However, the discussion about reliability and trustworthiness of its content is somehow limited. With concern to the level of trustworthiness of UGC content, Fotis et al. (2012) claimed user generated content is considered more trustworthy than official tourism websites, travel agents and mass media advertising, whereas information from other travelers in different websites was one of the most trustworthy sources. Chung and Koo (2014) found reliability and enjoyment are important benefits of social media usage in travel information search. Yoo and Gretzel (2008) have examined the role and impact of travel reviews in leisure trip planning, identifying the main factors which influences other users and their travel planning. It appears most of online review readers considered travel reviews provide up-to-date, detailed, reliable, unbiased, relevant and enjoyable information than other sources of information by travel service providers (Yoo & Gretzel, 2008). Also Cox et al. (2009) also mentioned the level of trustworthiness and reliability can be related with the postings in UGC sites. However, the authors state UGC sites are not always perceived as the most trustworthy or useful source in travel planning. According to the author, traditional sources such as state tourism organizations are perceived as more trustworthy than UGC sources, whereas only 36% of respondents trusting social networking sites (Cox et al., 2009). It is appears UGC content may be biased, for example, when posted by travel operators as independent reviewers. Hence, the question here remains if trustworthiness is a determinant factor in choosing social media and travel review sites in travel planning, in this case, focusing on the specific trip to Lisbon.

H4: The higher the trustworthiness of social media content, the higher the usefulness of social media and travel review sites in travel planning.

Concerning the impact of the usage of social media in travel planning, it is suggested it does influence tourists' holiday plans. In his study about the impact of social media use in travel planning, Fotis et al. (2012) states 65% of respondents who used social media in travel planning made a few or some changes to their original travel plans. Additionally, the author also claims social media was ranked as "somehow influential" in terms of destination and accommodation choice, presenting a high positive correlation between social media usage and destination and accommodation choice. Additionally, Yoo et al. (2009) also suggest the more tourists trust travel related UGC, the more impacts will have on their actual travel behaviors, namely, the number of places visited and amount of money spent on travel. Thus, the goal will be to test if the trustworthiness of social media content affect tourists' plans, and further analyze their impact in travel planning.

H5: The higher the trustworthiness of social content, the higher the changes their travel plans.

During the whole travel experience, the information search behavior may impact the destination image. It has been studied the use of different information sources as promotional tools influences the formation of tourists' destination images (Molina et al., 2010). In fact, Alcazár et al. (2014) state UGC can help tourists to form the image of a destination. In his study about the impact of UGC in destination image formation, the author founded it significantly influences the cognitive and affective dimensions of image, and on future tourists' behaviors. The trustworthiness of travel UGC content will therefore instill a positive image of the destination, which may vary throughout travel stages. According to Cox et al. (2009), travel-related UGC is mainly used during the information search stage of the process, while just a few use it during the trip or even after. It appears the variety of information from several sources will frame pre-purchase destination images (Walmsley & Lewis, 1984). Baloglu and Mcleary (1999) have suggested a destination choice model, stating the tourists' information sources used will influence perceptual/cognitive images about destination image. Ultimately, destination image will be more favorable if before and after purchase destination images match (Luo et. al, 2004). In this sense, the aim would be to prove if the

trustworthiness of social media and travel review sites content has a positive effect on tourist's destination image, and how official organizations could take advantage of these platforms to increase destination awareness.

H6: The higher the trustworthiness of social media content, the higher tourists' destination image.

Chapter IV Research Methodology

The presented research is based on a vast array of concepts, theories, language, techniques and instruments, with the ultimate objective to answer the research questions and current literature review issues. In this sense, it is necessary to define a correct methodology, which can meet these study objectives and support the hypothesis being studied.

Following this, after the theoretical framework, which allowed to understand the subject and social media phenomena, this part presents the empirical study related to the problem question, the formulation of hypothesis and variables, the sample, the information sample methods, data collection and respective statistical analysis. This chapter will clarify the aspects of the methodology used. The study comprises a qualitative data collection through interviews to official Portuguese DMOs, followed by a quantitative study involving a survey to tourists in Lisbon.

1. Type of study

In this project, data were collected in two different stages. Firstly, two interviews were conducted to two different official Portuguese DMOs, in a qualitative way, and secondly, quantitative data were collected through a survey and primary sources to tourists visiting Lisbon.

The quantitative study is a research method based on the observation of facts, events or other phenomena, aiming to contribute to the developments and validation of knowledge, and ultimately to generalize possible results. In quantitative research, it is considered data could be converted to numerical information, in order to classify and identify possible statistical evidence. The main advantages of quantitative research are the internal validity, structured data, possible generalization of results, predictability and low costs. In this sense, and given the need to gather information from consumers, a quantitative study was conducted among tourists who visited Lisbon, aiming at understanding the travel information search behavior at different levels. This was mainly a descriptive study, focused on gathering factual information and to profile the tourist who visits Lisbon.

Given one of the purposes of the study of analyzing the current practices of Portuguese DMOs promotion for the city of Lisbon, a qualitative analysis comprised two interviews with two marketing managers of Lisbon's official DMOs: *Entidade Regional do Turismo da Região de Lisboa* (ERT-RL) and *Associação do Turismo de Lisboa* (ATL). This type of research is essentially descriptive, aiming at analyzing the data in an inductive way, and not

necessarily involving any statistical methods. It was also an exploratory study, which allowed to understand the role of social media in tourists travel planning process, and, in this case, identify the opportunities for DMOs to promote their destinations through online media. In this sense, the perspective of official tourism entities will support the understanding of the potential of social media in destination promotion.

2. Research model

Before proceeding to data collection and analysis, it is paramount to define limits, structure and research project plan. The research project plan can be described as a plan or model of the research project, allowing exploring and answering the research questions (Cooper & Schindler, 2008).

Firstly, the literature review allowed to understand the subject, concepts, theories and problems, as well as to develop potential hypothesis. This analysis was focused on several core subjects. In one hand, it was reviewed the literature about tourism and tourists travel planning behavior, as well as the role of official entities in tourism activity. This review was also complemented with the context of tourism activity worldwide and Portugal, particularly Lisbon. On the other hand, it was reviewed the current literature in digital marketing, namely in social media and its applications in tourism. The literature review was based on the research on databases through ISCTE (B-on) and a wide array of publishers (Elsevier, Wiley, Springer, Kluwer, IEEE and SAGE, EBSCO). Other databases such as Proquest, JSTRO, ScienceDirect, SpringerLink, Wiley Library Online were also used, complemented by using Google and Google Scholar for further researches.

After defining the analysis model and research hypothesis, it was relevant to determine the methodology. It was defined a qualitative research based on two interviews, followed by a quantitative study based on primary data through a survey. Furthermore, the sample was defined, to which the survey would be applied to tourists in Lisbon. After gathering results, a preliminary analysis was conducted in order to assess the quality of data and test its reliability through statistical techniques. In addition, hypotheses were tested to ultimately discuss results, comparing them with the initial expectations. Finally, conclusions, contributions, limitations and suggestions were extracted for future research. Table 1 shows the research model used.

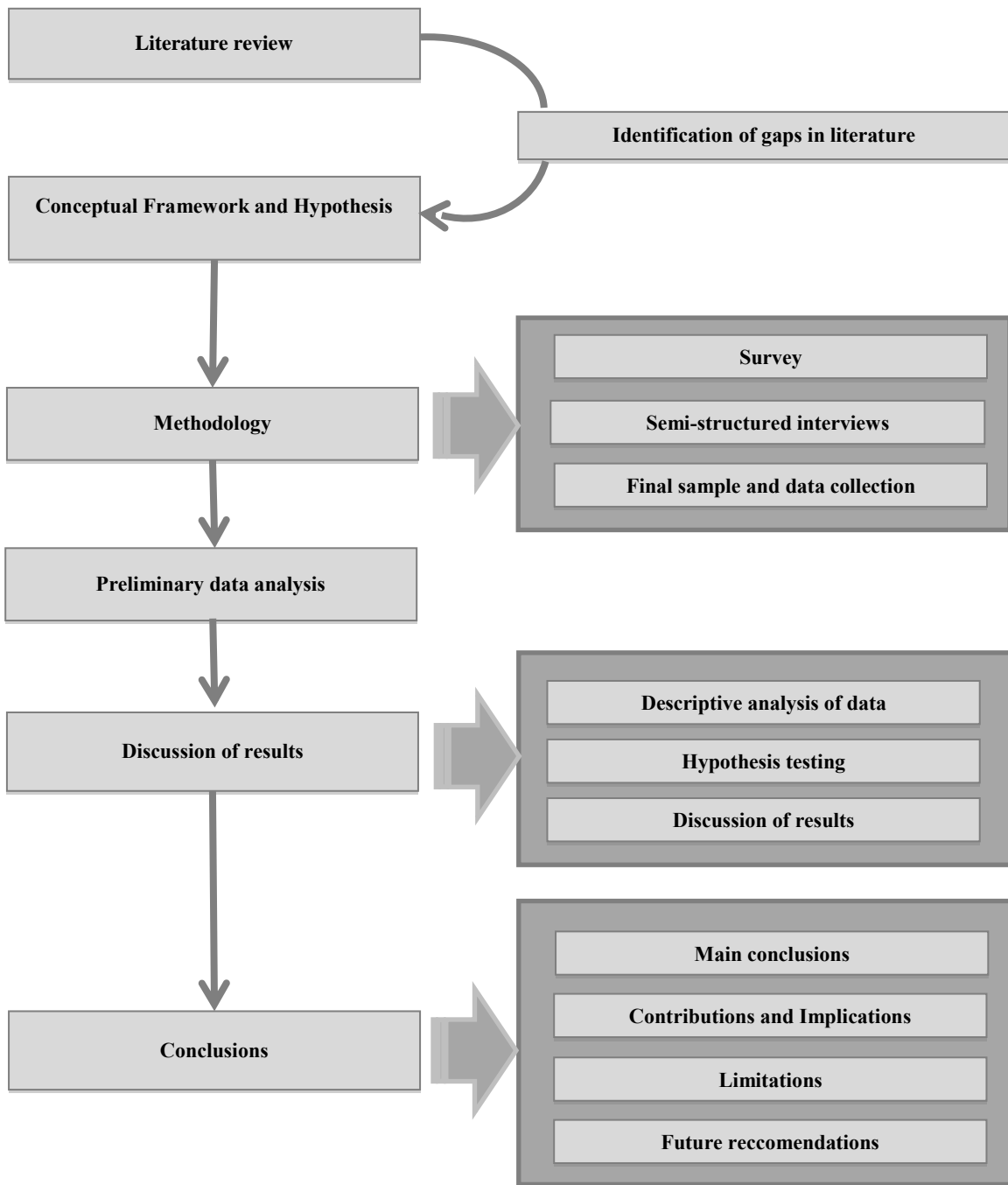


Table 1 - Research model

3. Quantitative study

3.1. Development of the survey

Based on literature review, hypotheses formulation and interviews with the entities mentioned, a preliminary version of the survey was created. Questions were built from initial variables identified in the literature analysis and by consulting other surveys with similar purposes.

The first version of the survey was developed. All questions were reviewed in order to assure exhaustive items and mutually exclusive, a subject per question, identical format, logic order of questions etc. (Frey & Oishi, 1995; Oishi, 2003). Apart from the general characterization of tourists and their trip, the survey was mainly focused on three parts (general use of social media in travel planning, use of social media in actual trip to Lisbon and knowledge about official tourism organization (DMOs), aligned with the hypotheses previously mentioned. However, following the recommendations of literature (Frey & Oishi, 1995; Oishi, 2003), an introductory text was included, presenting the aim of the study, target, privacy policy, the structure, some concepts, the acronyms used (e.g. DMO) as well as estimated time to fill the survey. This introduction aimed to avoid misunderstandings in terms of questions and response options, and to minimize measure error.

In order to understand which sort of questions the survey should comprise, 7 interviews were conducted to tourists in Lisbon with similar characteristics to the sample previously defined. The tourists interview protocol comprised 24 questions with four main parts (general travel planning process and information search, social media usage in travel planning process, social media usage in your actual trip to Lisbon and social media in destination promotion). The results have revealed the needs of tourists and the relevancy of some questions, as well as relevant data to build each question's content and scale items.

The survey was specifically designed for the purposes of this study developed according to several models. Most of questions derived from the tourists interview screening results, such as the number of information sources included (Q1 and Q3) in the options and the most referred social media sites (Q4). The purposes of social media sites (Q2) were adapted from Fotis et al. (2012) and Cox et al. (2009) models. Questions about social media influence (Q6 and Q7) were also adapted from Cox et al. (2009).

The initial survey included 16 questions, subdivided in four parts. The first version of the survey was then pre-tested with 7 different tourists in Lisbon, integrating both results from

the first pre-test and well as the contribution of the tourists interviewed. This group was chosen to be the most representative in the sample of tourists (Umbach, 2005). The time spent with the survey was significantly higher than initially expected (10 minutes), along with some comprehension issues (ambiguous questions, difficulty to read, meaning of words) (Presser et al., 2004). Other issues concerned the difficulty in understanding scales, the absence of response (not applicable in some cases), high level of uncertainty response, redundant and repeated questions and filter questions that would invalidate data.

Based on the results of the pre-test, the final version of the survey (Appendix 3) was created, with a total of 14 questions. It was considered a more adequate sequence of questions in a simple format, in order to be logic and coherent, taking approximately 5 minutes to be done. Most of questions were close-ended, while quantitative data was mostly used when possible and a 5-point Likert scale (1 to 5) with several scale nomenclatures (1-“never”, 5-“always”; 1-“not important”, 5-“very important”; 1-“not useful”, 5-“very useful”; 1-“strongly disagree”, 5-“strongly agree”; 1-“not satisfied”, 5-“very satisfied”). For each purpose of the study, different scales were used. Demographic and socio economic data, as well as journey information were based on similar surveys considering the tourist consumer behavior (Cox et al., 2009; Fotis et al., 2012; Pan & Fesenmaier, 2006).

In Q5 a bipolar scale was used to assess the characteristics of social media content. Bipolar scales are normally a five-step scale, using a description of opposing poles (McCroskey & Richmond, 1989). Also named semantic differential scale, the purpose of using this type of measurement provides directionality and intensity of the respondent reaction to opposite items (Osgood et al., 1957). In this case, they were used contrary adjectives to assess social media content using seven content criteria (trustworthiness, reliability, utility, usefulness, interest, creativeness, personalization and actualization). Bipolar scales have shown high internal reliability (McCroskey & Richmond, 1989). For certain questions, a number of examples were given in order to increase the reliability and provide answer support. The use of different scale nomenclatures derived from the need to assess different items at different levels. The first part (Part I) aimed to assess the importance given to each travel information source (TIS) and the frequency of each purpose when using social media sites. In Part II, the aim was to understand the utility of each TIS in the actual trip to Lisbon, and further explore the number of social sites used, the characteristics of its content, its influence on plans and destination image. In the last part (Part III), it was used the frequency of usage of official sources and the possibility to name some of them. Questions 11

and 12 only applied to previous knowledge on question 10. The purpose of these questions was to assess the level of satisfaction with Portuguese DMO online sites features and content. The scaled adopted for each question was based on previous studies and allowed to decrease subjectivity and increase comparison of data.

Not all respondents have answered questions Q11 and Q12. A screening question (Q10) was included in order to filter respondents knowing at least one of Portuguese DMO online site presented. Thus, it was asked not to proceed with the survey if respondents were not aware of none of the options. These remarks should be taken into account when considering the total number of responses reported in several tables on this section.

Two entities are responsible for Lisbon official online promotion: *ERT-RL* and *ATL*. In addition, *Turismo de Portugal* is also responsible to manage the promotion of Portugal as a destination, including the main tourism regions, in particular Lisbon. In this sense, the official online sites of *ATL* and *Turismo de Portugal* were included in the sample, as they are mostly dedicated to Lisbon international promotion, while *ERT-RL* is more focused on a regional and national scale. Even though *Turismo de Portugal* was not analyzed in this study, it was relevant to include it as it is more visible and recognizable by the majority of tourists. Five of most important official online sites were included in the survey (DMO official website, Facebook page, Twitter page, Youtube Channel and Pinterest page), from *ATL*'s and *Turismo de Portugal*. None of *ERT-RL* online sites were included in the sample due to inexistence of social media sites.

Demographic and socioeconomic variables were selected from previous literature. Due to a wide array of nationalities mentioned in the survey, countries of residence were later aggregated in six new variables. Following UNWTO (2015) nomenclature, these were aggregated into six regions: North and Central Europe, Eastern Europe, Southern Europe, North America, Central and South America and Asia and Oceania. In one hand, these regions represent the main continents, based on geographical boundaries and different cultural values (Hofstede, 1980) and media landscapes (Yoo et al., 2009). In addition, they represent the most important travel origin markets (UNWTO, 2013) and are according to most official statistics and secondary data for further data comparison. The field "income" was measure in Euro currency as the majority of the sample was European tourists. For other currencies, conversion was made based on an approximate currency exchange. The survey also included an open-ended question (country of residence) in order to not constrain the answers in this field.

3.2. Statistical data instruments and sampling

The existence of different types of variables (nominal, ordinal and quantitative) required the use of different statistical tests. Parametric tests are commonly used to when at least one of the variables is quantitative (Marôco, 2014). For the purposes of this study, the variables social media sites and travel review sites were aggregated in one sole variable (social media and travel review sites), which allowed a more feasible comparison. Other variables, such as country of residence, was transformed into different items namely regions of world, in order to aggregate results. Also, variables such as age, income and level of education were reduced items as only a few or no respondents have selected these options. Parametric tests were used to analyze the relation of social media and travel review sites, with tourists' individual characteristics (gender, age, education and income) and trip characteristics (length of stay, purpose of travel, type of visit and travel composition).

Two different types of parametric tests were applied in this study. *T-student* tests were used to check any differences between independent samples with two comparable groups (gender and type of visit). In addition, for independent samples with two or more comparable groups, ANOVA tests were computed (Marôco, 2014). In this case, some items were transformed in one sole variable. Both groups were random and independent. In order to analyze the usage of social media with the different moments of travel (pre, during and after trip), an Exploratory Factor Analysis (EFA) was conducted. The application of EFA in data analysis is to search and identify groups of interrelated variables, which can be combined into different factors (Marôco, 2014). In this case, the EFA was used to confirm the existence of three different moments of travel information (pre, during and after) and identify significant differences between them, adapted from Cox et. al (2009) study. The EFA has followed six different statistical methods: Kaiser-Meyer-Olkin (KMO) and Bartlett's test to test the validity of the model and variables relationships; anti-image matrices to analyze the variances and co variances; the total variance explained to check the unidimensionality of the variables; and the component matrix and rotated component matrix which highlights the items for each factor (Marôco, 2014). Lastly, a Cronbach's alpha was also used to test the internal reliability of each dimension. In addition, in order to test differences in the usage of social media between travel planning stages, an ANOVA with repeated measures was computed to identify any significant relationships between each of the new factors derived from EFA. Furthermore, correlation using Spearman correlation tests were computed to analyze the positive or

negative relationship between the trustworthiness of social media content and other variables. The significance level assumed for all cases was ,05.

Data collected were analyzed in order to identify the approximate normality of the variables. According to Marôco (2014), the application of parametric tests has to fulfill the two following conditions: (i) the dependent variable has a normal distribution and (ii) the equality of variances between two or more samples. Normality tests were conducted for the all hypotheses. For this study, Kolmogorov-Smirnov test (with Lillefors correction) was used to check the normality between the two comparable datasets and Levene's test to assess the equality of variances. Some authors argue variables are rarely normally distributed unless they are to flat or biased. A common statistical tool to assess the univariate normality is the analysis of skewness and kurtosis. According to Kline (2005), parametric models are valid for skewness values less than 3 and kurtosis values less than 7-10. Since the sample is above 30, the normality of quantitative variables can be assumed based on the Central Limit Theorem (Marôco, 2014).

The sample defined was 200 tourists to be representative. From 216 surveys, 16 were removed from the sample due to uncorrected or uncompleted answers. A random sample was selected from individuals visiting Lisbon, foreign tourists, aged between 18-70 years old and social media users of, at least, one social media site. Data were collected during the month of December 2014, in two different touristic areas of Lisbon: Chiado and Belem.

4. Qualitative study

4.1 Model of Interview

According to Quivy and Campenhoudt (1998), interview methods are fundamental processes of communication and human interaction, which allow researchers to collect valuable information. Moser and Kalton (1971) also points interviews allow to extract significant valuable information from the interviewee, even though is can be highly subjective. Barriball and While (1994) has mentioned some of the advantages of using interviews in data collection, namely a deep exploration of the interviewee attitudes, beliefs and motives, and by observing non-verbal indicators which may be relevant for certain sensitive subjects (Gordon, 1975). Other advantages are the increase detail in answers when compared to a questionnaire survey, ensuring interviewees answer all questions (Bailey, 1987).

In this study, two interviews were conducted to the two tourism entities responsible for official tourism promotion in Lisbon, *ERT-RL* and *ATL*. The use of a semi-structured interview allows more freedom of answer and to explore a subject more consistently, with general topic questions rather than rigid statements. In this sense, this model of interview fosters the discussion and clarification of issues raised by the interviewees (Hutchinson & Skodal-Wilson, 1992), allowing the interviewer to clarify any misunderstandings from respondents' answers or even appeal to their own memory in certain questions (Smith, 1992). Lastly, the flexibility of a semi structure interview allows to more complete information, although it could also lead to further dispersion and divagation of answers.

The interviews to *ERT-RL* and *ATL* were previously scheduled by email. Even though both interviews were requested at the same time, *ERT-RL* interview took place in November 25th 2014 while *ATL* interview occurred in December 2nd 2014. Both interviews took around 60 minutes each. A semi-structured interview protocol (Appendix 4) with 21 questions, was used to question both marketing managers of both entities, organized in four parts (the role of official tourism organizations in destination promotion; online marketing strategy, social media in Lisbon destination promotion and future perspective in destination promotion). The transcript of interviews was both written and audio recorded.

Chapter V Results

1. Survey analysis

The following part describes the data collected through survey application and main results obtained from the sample study.

1.1. Tourist Profile

The sample included 200 respondents, from which 87 were men and 113 were women (Table 2). The age of the respondents was distributed mostly between 18 years old and 45 years old, with a higher concentration in the “18-25” range (56%) and “26-35” (29,5%) of the total sample. In terms of education, more than half of the respondents have a higher degree (53,5%) while the remaining had completed a professional degree (41%) and, in less number, a high school level (5,5%). None of the respondents had only an Elementary degree.

Sample characteristics	N (200)	%
Gender		
Male	87	43,5%
Female	113	56,5%
Age		
18-25	112	56%
26-35	59	29,5%
36-45	19	9,5%
>46	10	5%
Level of education		
High School	11	5,5%
Professional Degree	82	41%
Higher degree	107	53,5%
Country of residence		
North and Central Europe	72	38,7%
Eastern Europe	6	3,2%
Southern Europe	30	16,1%
North America	13	7%
Central and South America	27	14,5%
Asia and Oceania	38	20,4%
Annual income (€)		
<20,000€	92	50,8%
20,000-39,999€	30	16,6%
40,000€-59,999€	34	18,8%
>60,000€	25	13,8%

Table 2 - Demographic and socio economic characteristics of respondents

Concerning the level of income, the majority of respondents earn less than 20,000€/year (50,8%). In addition, a greater part (35,4%) earns average annual incomes (20,000€ and 59,999€/year) while just 13,8% earn higher incomes than 60,000€. Out of 200, 19 tourists (9,5%) have not responded to this question. In terms of country of residence, most of the respondents currently live in North and Central Europe (38,7%), followed by Asia and Oceania (20,4%), Southern Europe (16,1%), Central and South America (14,5%), North America (7%) and Eastern Europe (3,2%). In terms of countries, Germany (11,5%) and Brazil (10%) were the most prominent, followed by UK (9,5%), China (8%), Italy (7,5%), Spain (7,5%), USA (5%) and South Korea (5%) (Appendix 5).

1.2.Characterization of the trip to Lisbon

Regarding the trip to Lisbon, most of the respondents stated as first-time visitors (83,8%) while remaining were repeaters (16,2%) (Table 3).

Trip characteristics	N (200)	%
Type of visit		
First timer	166	83,8%
Repeater	32	16,2%
Purpose of visit		
Leisure	159	80,3%
Business	9	4,5%
Visiting Family and Relatives (VFR)	30	15,2%
Duration of the stay		
<1 day	4	2%
1-3 days	89	44,5%
4-14 days	83	41,5%
>14 days	24	12%
Travel accompany		
Alone	24	12,1%
With family	59	29,5%
With friends	104	52,3%
With others	12	6%
Booking method		
By myself	156	78%
Tour operators/travel agencies	11	5,5%
Friends/relatives	30	15%
Company	3	1,5%
Frequency of travel		
<15 days/year	32	16,2%
15-30 days /year	92	46,5%
31-60 days/year	50	25,3%
>60 days/year	24	12,1%

Table 3 - Trip characteristics of respondents

The purpose of visit to Lisbon was mostly leisure (80,3%), followed by VFR tourism (15,2%), and in less number, business travelers (4,5%). The duration of the stay in Lisbon was mostly between 1 to 3 days (44,5%) and 4 to 14 days (41,5%). Furthermore, day trips (less than 1 day) were scarcely represented (2%) as well as longer stays (more than 14 days), with just 12%. In terms of travel accompany, most of respondents stated they travelled with their friends (52,3%) and family (29,5%). Respondents travelling alone accounted for 12,1% while travelling with others just 6%. For most of respondents, the number of days of travel is mostly between 15-30 days/year (46,5%), followed by 31-60 days/year (25,3%) and less than 15 days/year (16,2%). The majority of respondents have booked their trip to Lisbon by themselves (78%) or through friends/relatives (15%). Only a few number (11 respondents – 5,5%) have used tour operators/travel agencies.

1.3.Travel information source usage in general planning

The first question of the survey aimed to identify the travel information sources used in general travel planning, or at any trip taken recently. Respondents were asked to rank from 1 to 5 (1-not important/5-very important) their level of importance given to each source. According to results given, the most important travel information source in general travel planning was travel websites (mean=4,07), followed by own experience (or previous visit to destination) (mean=4,04), travel review sites (mean=4,02), friends and relatives (mean=3,95) and social media sites (mean=2,90). The least important sources used in general travel planning were printed media (mean=2,60), official tourism organizations (mean=2,40) and tour operators/travel agencies (mean=1,95).

In Q3, respondents were asked to assess the usefulness of the same eight sources presented on Q1 in their actual trip to Lisbon. In the case of Lisbon, most of respondents argued travel review sites were the most useful information source (mean=3,68), followed by travel websites (mean=3,61). Friends and relatives (mean=3,58) and own experience (mean=2,88) were also useful in information search about Lisbon. Social media sites were the fifth most useful source in Lisbon trip planning (identical to general planning), as well as printed media (6th), official Portuguese tourism organizations (7th) and tour operators/travel agencies (8th). Table 32 (Appendix 7) compares both results

1.4.Social media usage in the travel planning process

This part of the study comprises the analysis of social media usage and its purposes, content and influence on tourist holiday plans.

1.4.1. Purpose

One of the questions in the survey (Q2) addressed the purposes of social media sites in travel planning throughout the three stages of travel planning (pre, during and after travel). The results are shown in Table 33 (Appendix 7). At an early stage of travel (pre-travel), social media was primarily used to “search for reviews of hotels, restaurants and attractions” (mean=4,01) and “enquire about the destination, accommodation, restaurants, etc”. (mean=3,89). It is also used to “collect information only available online” (mean=3,75) and, in a less extent, to “compare travel alternatives and narrow down choices” (mean=3,50) and “search specific campaigns and offers” (mean=2,85). During the trip, most of respondents used social media to “search for particular information at the destination” (mean=3,78) and to “stay connected with friends” (mean=3,46). Additionally, tourists have also updated their own social media platform, although in a less extent than other activities. Lastly, after the trip most of tourists have used social media “to share their experiences, photos and videos with others” (mean=3,76) and “get inspiration for their next travel” (mean=3,18), and ultimately, to” write travel reviews and recommendations” after travel (mean=2,70).

1.4.2. Content

Based on pre-screening interview results, this study has included eight examples of social media, compiling the most popular social media sites and specific travel social sites (e.g. independent travel blogs). Table 34 (Appendix 7) illustrates respondents answers. Concerning the type of social media sites used in general travel planning, travel review sites (mean=3,71), (namely Tripadvisor) and independent travel blogs (mean=3,23) were the most used sources. Among the respondents, more than half (64%) have “always” or “often” used Tripadvisor in their general travel planning while half of respondents (50%) have used independent travel blogs. Pinterest (mean=1,44) and Twitter (mean=1,32) were only used by a minority of respondents in their travel planning.

The perceived content in social media sites was measured in seven content categories, which aimed to analyze the tourists’ opinion of social media content about Lisbon. Respondents were asked to assess the content through seven attributes, on a bipolar scale from 1 to 5. Table 35 (Appendix 7) shows most of respondents were rated above 3, showing a quite neutral opinion regarding social media content. The highest attributes to social media content about Lisbon ranked were Interest (mean=3,91), Utility (mean=3,89) and

Trustworthiness (mean=3,79) while the less rated was Personalization (mean=3,48) and Creativeness (mean=3,43).

1.4.3. Influence

The impact of social media usage in travel planning was analyzed through two different scopes: change in original travel plans and destination image. Most of tourists revealed social media has influenced their plans in some extent. More than half of respondents made a “few” (48,7%) or “several” changes (16,4%) to their original travel plans after searching at social media sites about Lisbon (Table 36 – Appendix 7).

Regarding the visit to Lisbon, the general destination image was analyzed through eight different items in three dimensions: attractions/accommodation, value/environment and quality of the experience, based on Baloglu and McCleary (1999) destination image framework. Attractions/accommodations included “high number of interesting attractions and activities”, “high number of high quality restaurants” and “wide range of accommodation options for everyone”; value/environment includes “safe travel destination”, “affordable” and “hospitable”; and quality of the experience as “good overall travel experience” and “recommend to my friends and relatives”. Most of respondents rated all eight items above 3. Table 37 (Appendix 7) shows most of respondents agree they were likely to recommend the destination to their friends and relatives (mean=4,49) and had a good overall experience (mean=4,36). Also in terms of attractions and destination value/environment, most of respondents considered that Lisbon offers a high number of attractions and activities, high number of restaurants and different types of accommodation. As for value/environment, tourists considered the city as a safe, affordable and hospitable destination. Lastly, Table 38 (Appendix 7) shows most of respondents stated their visit to Lisbon was according (48%) or above their expectations (45%).

1.5. DMOs sites evaluation

The last part of the survey enquired about the online presence of Portuguese DMOs and tourists’ perception of social media sites features and content of these entities.

1.5.1. Usage of online tourism sources

When asked about the usage of official tourism online sources, most of respondents stated they have never (31,8%) or rarely (23,2%) used this type of information to search travel contents (Table 39 – Appendix 7).. On the other hand, about 45% have used with significant frequency (from sometimes to always) official online sources, yet only 7,6% stated they

always used official sources. When asked about any Portuguese DMO official online site, less than half of respondents stated they know at least one (43%). Regarding the Portuguese DMOs official homepage websites, Visit Portugal (30,3%) and Visit Lisboa (24,1%) homepage websites are the most recognized sources, followed by their Facebook pages (17,1% and 15,6%, respectively). Visit Portugal social media sites are generally better known than Visit Lisboa. Other social media pages, such as Twitter, Youtube and Pinterest, were still scarcely used by tourists (Table 40 – Appendix 7).

1.5.2. Portuguese DMOs sites content and features

The last two questions on the survey aimed at understanding the level of satisfaction of Portuguese DMOs sites' content and features. In terms of features, nine items were included, including quality of information, format and layout, navigation and communication, and privacy settings.

According to the results given, most of users of Portuguese DMOs social media sites have presented average levels of satisfaction with most of site features. Among all features, “information provided” (mean=3,79), “easiness of use” (mean=3,78) and “updated contents” (mean= 3,76) were the three main features with higher levels of satisfaction, followed by “useful format” (mean=3,63) and “trustworthiness of social networking information” (mean=3,61) (Table 41 – Appendix 7). Other features such as the “ability to communicate with other users” and “privacy settings” have shown the lower levels of satisfaction. Regarding content information, the majority of users agree Portuguese DMOs social media sites provide “general information” (mean=3,95) about the destination, and would recommend to friends and family (mean=3,82) (Table 42 – Appendix 7). In addition, results have shown photos and videos of the destination and insight information (such as tips, local places, special events) are also provided by Portuguese DMOs sites, followed by special campaigns and promotional offers.

2. Interview analysis

In order to analyze the public official promotion in the region of Lisbon, two interviews with two official destination management organizations (DMOs) were conducted, namely *Entidade Regional do Turismo da Região de Lisboa (ERT-RL)* and *Associação do Turismo de Lisboa (ATL)*.

ERT-RL acts as a tourism management body of the region, with financial and administrative roles, and responsible for the promotion of regions in the domestic market (in

cooperation with *Turismo de Portugal*, the Portuguese national tourism management body). *ATL* is a regional promotional agency, which is responsible to execute the regional external tourism promotion plans, in accordance to the directives from *Turismo de Portugal*. In terms of its objectives in tourism promotion, *ERT-RL* is more concentrated in the traditional Portuguese products for the internal market (mainly focused in gastronomy and local regional events) while *ATL* aims to showcase the greatest tourist products of Lisbon (culture, history, landmark monuments) as well as strategic products for external markets (golf, surf and touring). In this sense, each organization differs in terms of their geographical roles. While *ERT-RL* acts in Lisbon and surrounding regions (18 in total), *ATL* is more focused on the promotion of the city itself, and its products. Both organizations act as the main enablers of international promotion of the Lisbon.

According to its communication director, *ERT-RL* communication strategy still relies on “hard” marketing tools. In terms of the internal market, regional promotion is much dependable on traditional media tools, such as press, trade fairs and events. Although these promotional channels are still primordial for these regions, online platforms, particularly its website, have been developed during last year. On the other side, *ATL* had developed a consistent online marketing strategy for international tourists, including partnerships with *Turismo de Portugal* and other local tourism entities. Their marketing plan is executed by an outsourcing communication agency, which has to be approved by both regulatory public bodies (*Câmara Municipal de Lisboa* and *Turismo de Portugal*) and private members. This plan is reviewed every five years.

In terms of means of promotion, both online and press are complementary to each other for these organizations. *ERT-RL* still highly relies on press, trade fairs and regional events, in addition to an official website (www.ertlisboa.pt) featuring both touristic and institutional information, as well as regular events and attractions taking place in the region of Lisbon. *ATL* currently operates several online platforms: two websites (www.visitlisboa.pt), the official homepage featuring both relevant touristic information and institutional contents, and a booking-related website (www.askmelisboa.com), including touristic info and events, with the possibility of book tickets and make hotel reservations; a number of social media sites (Facebook, Twitter, Pinterest and Youtube); presence in online media travel websites and blogs (e.g. Tripadvisor, Travel blogs, *Publitoris*) as well in international press and an official monthly brochure in two languages (*Follow Me Lisboa*). Most of online presence is through newsletters, special campaigns and contests, events promotion and the possibility of booking

or purchasing at www.askmelisboa.pt. *ATL* official homepage is currently available in seven different languages (Portuguese, German, French, Italian, Spanish, English and Russian), aiming to address and ease the communication with various markets. While *ERT-RL* aims mostly to internal and “extended” market (namely Spain but also other European destinations), *ATL* focus on external markets, such as UK, Germany, France, Spain and Brazil, and new strategic ones, such as Russia and China.

Although both entities consider social media as a crucial way to promote Lisbon and its products, both interviewees claimed promotion cannot solely rely in online connections. For *ERT-RL*, face-to-face promotion is still primordial although the organization is mostly unknown by tourists. On the other side, *ATL* notes the importance of combining different media sources to a heterogeneous demand, and the importance of social media to segment and communicate to each target differently. At the moment, both organizations consider their websites not currently matching tourist’s expectations, being outdated, difficult to navigate and less attractive. Both also considered one of the main difficulties related to the lack of staff to manage online promotion efficiently, as well as conflicting interests in decision making among all entities that compose these two groups (public bodies and tourism companies). In addition, the continuous administrative changes in recent years (*ERT-RL* was created just a year ago) also affect the implementation of decisions.

ERT-RL does not currently operate any social site while *ATL* currently detains a Facebook, Twitter, Youtube and Pinterest page. Social media is an integrant part of *ATL* marketing department. Two people of staff are responsible to answer customer queries even though this is not a regular practice. Thematic posts (e.g. gastronomy initiatives or Christmas events), special campaigns and online competitions are among the most used features. In order to assess the effectiveness of social media, *ATL* often monitors through Google and Facebook stats software. *ERT-RL* does not currently operate a Facebook page or a webpage monitoring system as they are still in process of implementing these platforms.

For the near future, both interviewees expect *ERT-RL* and *ATL* to rebuild their online strategy, launching a new website to increase their visibility along with the increase presence in the main social media sites. Future plans include the launch of a travel app for Lisbon, available for both Android and Apple devices, which would allow to adapt the experience to each tourist. *ATL*’s visibility is clearly superior to *ERT-RL*, so they should be developed in cooperation to create a consistent image of the destination. In addition, along the consolidation of the online image of Lisbon, official entities have now established a recent

communication plan for the next four years (2015-2019). One of top priorities is to increase demand to other places such as *Arrabida*, *Mafra*, *Ericeira* and *Arco do Tejo*, key development areas to promote other types of tourist products (golf, surf, bird watching, cruising, etc.), which, ultimately, should also be reflected in destination promotion campaigns.

3. Hypothesis testing

Following the descriptive analysis of the results, five of the twelve hypotheses were supported (H1c, H3, H4, H5, H6). The results have shown social media sites are mainly used in pre travel stage (according to EFA results), whereas differences across different moments of travel were noted. In addition, it has also been shown the greater trustworthiness of social media content will increase the usefulness of social media in travel planning, the change original plans and, ultimately, destination image. Even though the importance given to social media and travel review sites in travel planning is different among tourists' individual characteristics (gender, age, education and income), only level of education has shown statistical significance. Concerning trip characteristics (length of stay, purpose of the trip, type of visit and travel accompany), none of the relationships have demonstrated statistical evidence in their influence on social media usage in travel planning..

3.1. The importance given to social media and travel review sites in travel planning is influenced by tourist's individual characteristics

H1a: The importance given to social and travel review sites in travel planning is influenced by gender.

Out of 200 respondents, 113 were women and 87 were men. In order to assess the influence of gender over the importance of social media and travel review sites, a *t student* was computed. Table 4 shows there are no major differences among the means of both variables. Also, results have shown no significant relationship between the variables ($p=,139>,05$), which suggests gender does not influence the importance given to social media sites. Thus, H1a is rejected.

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	Sex						95% CI for Mean Difference	t	df	Sig.
	Male			Female						
	M	SD	n	M	SD	n				
Importance given to Social Media and Travel Review sites	3,41	1,054	87	3,50	,920	113	-,366 ,185	-,648*	12	,139

Table 4 - Results of t-student and Descriptive Statistics for Importance given to Social Media and Travel Review sites by Gender

H1b: The importance given to social and travel review sites in travel planning is influenced by age

Due to a low number of respondents of higher age categories, namely 46-55, 56-65 and >65, the variable *age* was aggregated into four new groups (18-25; 26-35; 36-45; >46) to allow a more feasible comparison. Since more than two groups are being considered, an ANOVA test was computed. Results have shown the relationship between age and the importance given to social media sites was not significant ($p=,242>,05$). Table 5 and 6 show there are slight differences in the means of different age groups, with younger groups giving more importance to social media sites in travel planning than elder groups, yet not statistically significant. In this sense, H1b is rejected.

Age group	n	Mean	Std. Deviation
18-25	112	3,47	,896
26-35	59	3,58	1,074
36-45	19	3,39	1,137
>46	10	2,90	,907

Table 5 - Results of Descriptive Statistics for Importance given to Social Media and Travel Review sites by age

Source	df	SS	MS	F	Sig.
Between Groups	3	4,018	1,339	1,406	,242
Within Groups	196	186,737	,953		
Total	199	190,755			

Table 6 -Results of Anova test and Descriptive Statistics for Importance given to Social Media and Travel Review sites by age

H1c: The importance given to social and travel review sites in travel planning is influenced by level of education.

Given the results of the survey, only three educational groups were considered in the sample (High School, Professional Degree and Higher Degree) as no respondent has selected

“Elementary”. Given the existence of more than two groups, an ANOVA test was computed. Results have shown the relationship between variables was significant ($p=,010<,05$), which means the importance given to social media and travel review sites differ between educational groups.

Level of education	n	Mean	Std. Deviation
High School	11	3,77	1,057
Professional Degree	82	3,68	,921
Higher Degree	107	3,27	,982

Table 7 - Results of Descriptive Statistics for Importance given to Social Media and Travel Review sites by level of education

Source	df	SS	MS	F	Sig.
Between Groups	2	8,747	4,374	4,734	,010
Within Groups	197	182,008	,924		
Total	199	190,755			

Table 8 - Results of Anova test and Descriptive Statistics for Importance given to Social Media and Travel Review sites by level of education

Hence, when the H_0 is rejected in the ANOVA test, a *post-hoc* test should be used to understand which groups are related. *Post hoc* tests compare mean groups from the main factors. In this case, a *Scheffe* test was used due to the low number of groups compared. A *Scheffe* test allows multiple comparisons of group means, proving that, if ANOVA results are significant, at least one contrast between groups will be (Marôco, 2014). The main factor was the level of education. Table 9 shows a significant relationship ($p=,017<,05$) between Professional degree and Higher degree, which means the importance given to social media and travel review sites differ between these two groups. Hence, H_{1c} can be partially accepted.

Education	Education	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
High School	Professional Degree	,096	,309	,953	-,67	,86
	Higher Degree	,502	,304	,259	-,25	1,25
Professional Degree	High School	-,096	,309	,953	-,86	,67
	Higher Degree	,406*	,141	,017	,06	,75
Higher Degree	High School	-,502	,304	,259	-1,25	,25
	Professional Degree	-,406*	,141	,017	-,75	-,06

Table 9 - Scheffe test

H1d: The importance given to social and travel review sites in travel planning is influenced by level of income.

Concerning respondents level of income, the ANOVA test proves the relationship between income and the importance given to social media and travel review sites was not significant ($p=,713>,05$), meaning the importance given to social media and travel review sites is not influenced by tourists' level of income. Hence, H1d is rejected.

Level of income	n	Mean	Std. Deviation
<20,000€	92	3,42	,947
20,000€-39,999€	30	3,65	1,076
40,000€-59,999€	34	3,44	1,043
>60,000€	25	3,38	1,139

Table 10 - Results of Descriptive Statistics for Importance given to Social Media and Travel Review sites by level of income

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,410	3	,470	,457	,713
Within Groups	182,236	177	1,030		
Total	183,646	180			

Table 11 - Results of Anova test and Descriptive Statistics for Importance given to Social Media and Travel Review sites by level of income

3.2.The importance given to social media and travel review sites in travel planning is influenced by the trip characteristics.

H2a: The importance given to social media and travel review sites in travel planning is influenced by the duration of stay.

Computing a ANOVA test, results does not show a significant value ($p=,378>,05$), proving the relationship between the importance of social media and travel review sites, and the length of stay is not significant as well. Hence H2a is rejected.

Duration of stay	n	Mean	Std. Deviation
<1day	4	3,75	1,041
1-3 days	89	3,54	,946
4-14 days	83	3,33	1,046
>14days	24	3,60	,834

Table 12 - Results of Descriptive Statistics for Importance given to Social Media and Travel Review sites by duration of stay

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	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,978	3	,993	1,036	,378
Within Groups	187,777	196	,958		
Total	190,755	199			

Table 13 - Results of Anova test and Descriptive Statistics for Importance given to Social Media and Travel Review sites by duration of stay

H2b: The importance given to social media and travel review sites in travel planning is influenced by the purpose of the trip

With regard to the purpose of trip, out of 200, most of respondents were travelling for leisure (159), followed by Visiting Family and Relatives (30) and, in a less extent, business travelers (9). According to the results given, business tourists do consider social media and travel review sites more important in travel planning (mean=3,78) than leisure travelers. However, when computing ANOVA tests, it proves this relationship is not significant ($p=,173>,05$), meaning the importance given to these travel information sources is not dependable on the purpose of the trip. Hence, H2b is rejected.

Purpose of trip	n	Mean	Std. Deviation
Leisure	159	3,40	,996
Business	9	3,78	1,253
Visiting Family and Relatives	30	3,72	,784

Table 14 - Results of Descriptive Statistics for Importance given to Social Media and Travel Review sites by purpose of trip

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3,400	2	1,700	1,772	,173
Within Groups	187,136	195	,960		
Total	190,537	197			

Table 15 - Results of Anova test and Descriptive Statistics for Importance given to Social Media and Travel Review sites by purpose of trip

H2c: The importance given to social media and travel review sites in travel planning is influenced by the level of experience with a destination (first timer or repeater).

Concerning the number of visits to the destination, it is noted most of respondents were first timers (166) in opposition to a few number of repeaters (32). In this case, a *t-student* test was computed to verify the relationship between the experience with the destination with the importance given to social media and travel review sites in travel planning. Even though it is

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noted first time travelers gave more importance to social media and travel review sites, this relationship cannot be considered statically significant ($p=,135>,05$),. Therefore, H2c is rejected.

	First timer			Repeater			95% CI for Mean Difference	t	df	Sig.
	M	SD	n	M	SD	n				
Importance given to Social Media and Travel Review sites	3,48	,954	166	3,39	1,134	32	-,287, ,463	-,464	196	,135

Table 16 - Results of t-student and Descriptive Statistics for Importance given to Social Media and Travel Review sites by level of experience with the destination

H2d: The importance given to social media and travel review sites in travel planning is influenced by travel composition

Considering the trip related characteristics, the influence of third parties, mainly friends and family, was already mentioned before. In the sample considered, more than half were travelling with friends (104) and family (59). A few of independent travelers were noted as well, which gave more importance to social media and travel review sites in travel planning than travelers accompanied by their friends or family. However, after computing an ANOVA test, this relationship does not present statistical significance ($p=,481>,05$). Hence H2d is rejected.

Travel composition	n	Mean	Std. Deviation
Alone	24	3,56	,838
With Family	59	3,31	1,026
With friends	104	3,50	,936
With others	12	3,67	1,371

Table 17 - Results of Descriptive Statistics for Importance given to Social Media and Travel Review sites by travel composition

Source	df	SS	MS	F	Sig.
Between Groups	3	2,388	,796	,825	,481
Within Groups	195	188,079	,965		
Total	198	190,467			

Table 18- Results of Anova test and Descriptive Statistics for Importance given to Social Media and Travel Review sites by travel composition

3.3.Social media sites are mostly used in pre-trip stage of travel planning

In order to understand the purposes of social media usage in the different stages in travel planning (pre, during and after travel), an Exploratory Factor Analysis (EFA) was conducted for Q2. Firstly, the correlation matrix shows eleven items, adapted from Cox et al. (2009) study. In order to confirm the validity of EFA, a Kaiser-Meyer-Olkin (KMO) was conducted, followed by an internal consistency analysis based on Cronbach's Alpha to test the reliability of the extracted components. Appendix 9 shows the recommended values of KMO for EFA, which are expected to be above 0,05 (Marôco, 2014). The analysis of the structural relationship of the eleven items related to the different stages of travel planning was conducted through the analysis of the correlation matrix, extraction method of principal component and a *varimax* rotation.

The first step was to test the validity of the factor analysis. Appendix 9 has shown acceptable KMO values for all variables to proceed with the analysis. The next step was to analyze the anti image matrices. According to Marôco (2014), anti-image matrices should also be analyzed to evaluate adequacy of the factor with the variables through the Measure of Sampling Adequacy (MSA). The values are expected to be greater than 0,5 ($MSA > 0,5$) Appendix 9 shows the anti-image matrix correlations values, with all items greater than 0,5, confirming the suitability of the factors analyzed. The extraction of variables was conducted through a *varimax* rotation. The common factors extracted presented an *eigenvalue* above 1. The factorial analysis has converged to three main components, which explains 69% of the total variance. The first component explains 41,8%, the second 18,7% and the third 9%. Results have shown three different factors, corresponding to the three dimensions studied in travel planning: the first to *pre travel*, the second to *during travel* and third to *after travel*. Additionally, communalities values after extraction were computed. Communalities show the amount of variance in each variable (Marôco, 2014) and are expected to be greater than 0,5. Appendix 9 shows the initial and after extraction communalities. Results show all items are above 0,5 except for one (*search for specific campaigns and offers* – 0,466). However, due to the correlation verified and the proximity to acceptable value of 0,5, this variable was not removed.

The rotated component matrix allowed to understand which variables belong to each dimension. The loadings for each dimension are expected to be over 0,4 (Marôco, 2014). According to Table 19, all variables present loadings greater than 0,4. However, the item to *search for particular information at the destination* was included in the first retained factor

and not in the second. This might be explained by differences in tourists' usage of social media sites in travel information search, suggesting tourists search for information about the destination more often at pre travel stage, before arriving to the destination. In this sense, this variable was included in the first dimension (pre trip). In addition, the item *share experiences, photos and videos with others* presented a higher loading in the second instead of the third dimension. Hence, this item was included in during trip dimension and not in after trip, being included in the second retained factor instead of the third.

	Component		
	Pre trip	During trip	After trip
To collect particular information only available online	,772	,110	,064
To enquire about the destination, accommodation, restaurants	,898	-,048	,104
To search for specific campaigns and offers	,655	,185	,058
To search for reviews	,869	,041	,090
To compare travel alternatives and narrow down my choices	,772	,082	,224
To update my own social media platform	,154	,861	,102
To stay connected with my friends	,040	,869	,090
To search for particular information at the destination	,610	,323	,236
To share my experiences, photos and videos with others	,160	,674	,470
To write travel reviews and recommendations	,044	,133	,898
To get inspiration for my next travel	,342	,207	,721

Table 19 - Component values from the EFA

Even though the EFA confirms the predicted values and dimensions, internal consistency should also be analyzed to confirm the reliability of these dimensions. The analysis of internal consistency related to the different stages of travel planning was conducted through the use of Cronbach's alpha. Recommended values should be greater than 0,5. Table 20 shows the Cronbach's alfa values computed for each dimension. Results confirm the internal consistency and cohesion between these variables, ranging from a minimum of 0,653 (acceptable) for after trip and 0,870 (good) for pre trip dimension. Hence, this confirms the scale used with three factors measured. At the end, the first dimension included six items, the second 3 items and the third had 2 items. These factors were retained in the database for further statistical analysis.

Variables	Cronbach's alpha	N of items
Pre trip	,874	6
During trip	,799	3
After trip	,653	2

Table 20 - Chronbach's alpha values from the EFA

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Following this, the means of the three new variables were computed. Table 21 shows the mean for pre trip (3,63) is higher than during and after trip, suggesting social media is more used in a pre travel stage.

	Mean	N of items
Pre_trip	3,6333	6
During_trip	3,4229	3
After_trip	2,9369	2

Table 21 - Comparison of means of new variables from EFA

Furthermore, in order to test to know to test the difference between the usage of social media throughout the different stages of travel information search, an ANOVA with repeated measures was computed. This test compares three or more group means where the respondents appear to be the same (Marôco, 2014). In this case, respondents were asked several times at different stages of travelling, allowing to compare the usage of social media (dependent variable) throughout the process.

In order to proceed to an ANOVA test with repeated measures, data have to fulfill five assumptions: (1) the dependent variable should be continuous: (2) the independent variable should include at least two similar groups, related to the same subject of research; (3) no relevant outliers in the related groups: (4) the dependent variable has a normal distribution: (5) the variances between combinations of different groups should be equal (sphericity) (Marôco, 2014). Firstly, to compute an ANOVA test with repeated measures, factors were labeled: (1) Pre travel; (2) During travel; and (3) After travel. Factor 1 was defined as “usage”. The test Within-subject effects shows the significance level of the different stages of travel information search. Since the assumption of sphericity is violated ($p=,626>,05$ - Appendix 10), the Greenhouse-Geisser value is used as reference for analysis. Table 23 shows there is statistical significance ($F(1,991,392.129) = 34.139, p=,000 <.05$).

usage	Dependent Variable
1	Pre_trip
2	During_trip
3	After_trip

Table 22 - Within Subject Factors

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Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
usage	Sphericity Assumed	50,677	2	25,338	34,139	,000	,148
	Greenhouse-Geisser	50,677	1,991	25,459	34,139	,000	,148
	Huynh-Feldt	50,677	2,000	25,338	34,139	,000	,148
	Lower-bound	50,677	1,000	50,677	34,139	,000	,148
Error(usage)	Sphericity Assumed	292,432	394	,742			
	Greenhouse-Geisser	292,432	392,129	,746			
	Huynh-Feldt	292,432	394,000	,742			
	Lower-bound	292,432	197,000	1,484			

Table 23 - Tests of Within-Subjects Effects

Although these results show there are differences across different group means, there is no information where these differences exist. Hence, a *Bonferroni post hoc* test is computed, which allows to investigate which means differ from each other. In this sense, it provides the comparison of social media usage across the different moments of travel planning. Bearing in mind the labeled factors, results claim there are significant differences between pre travel (factor 1) and after travel (factor 3) ($p=,000<,05$), and between during travel (factor 2) and after travel ($p=,000<,05$), yet not between 1 and 2 ($p=,077>,05$). This can also be perceived by the reduction of mean difference (I-J) whereas the social media usage significantly decreased. Therefore, it may be concluded social media usage is mostly used in the pre travel phase and differs from after travel, but not from during travel phase. Thus, H3 is accepted.

(I) factor1	(J) factor1	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
1	2	,199	,088	,077	-,015	,412
	3	,695*	,084	,000	,493	,896
2	1	-,199	,088	,077	-,412	,015
	3	,496*	,088	,000	,284	,708
3	1	-,695*	,084	,000	-,896	-,493
	2	-,496*	,088	,000	-,708	-,284

1 – Pre trip; 2 – During trip; 3 – After trip

Table 24 - Pairwise Comparisons between factors

3.4.The higher the trustworthiness of social media content, the higher the usefulness of social media and travel review sites in travel planning.

In order to test the relationship between trustworthiness of social media and the usefulness of social media and travel review sites, a bivariate correlation analysis was undertaken. Table 25 shows the two variables are statistically significant ($r=,252$, $p =,000<,05$). In addition, the Spearman coefficient shows the two variables are positively correlated, meaning a higher trustworthiness of social media content will increase the usefulness of social media and travel review sites in travel planning, being positively correlated. H4 is accepted.

Correlations Coefficient			
	Trustworthiness of SMC	Usefulness of SM&TR	Sig. (2-tailed)
Trustworthiness of SMC	1,000	,252**	,000
Usefulness of SM&TR	,252**	1,000	,000

Table 25 - Correlation matrix between trustworthiness of social media content (SMC) and usefulness of social media and travel review sites (SM&TR)

3.5.The higher the trustworthiness of social media content, the higher the changes in tourists travel plans.

In order to test the relationship between trustworthiness of social media content and change in original travel plans, a correlation test was conducted. Results have shown a positive correlation ($r=,156$ / $p =,034<,05$), whereas trustworthiness of social media content appears to influence travel holiday plans. Also, the higher the trustworthiness of social media content, the higher the trend to make changes in original travel plans, thus H5 is accepted.

Correlations Coefficient			
	Trustworthiness of SMC	Change in tourists travel plans	Sig. (2-tailed)
Trustworthiness of SMC	1,000	,156**	,034
Change in tourists travel plans	,156**	1,000	,034

Table 26 - Correlation matrix between trustworthiness of social media content (SMC) and changes in tourists travel plans

3.6. The higher the trustworthiness of social media content, the higher the tourists' destination image.

Ultimately, to test the relationship between trustworthiness of social media and tourists' destination image, a new correlation test was computed. Results have shown a positive relation ($r=,361$ /, $p =,001 <,05$), proving a higher trustworthiness of content will positively influence the destination image. Hence, H6 is accepted.

Correlations Coefficient			
	Trustworthiness of SMC	Destination image	Sig. (2-tailed)
Trustworthiness of SMC	1,000	,237**	,001
Destination image	,237**	1,000	,001

Table 27 - Correlation matrix between trustworthiness of social media content (SMC) and destination

4. Summary of results

From results given, social media users are mostly young (between 18-25 years old), from both genders but predominantly female. The respondents of this study, namely tourists visiting Lisbon, were mainly from North and Central Europe and Asia and Oceania, with average annual incomes ranging between 20,000€ and 60,000€, whereas half of them earning less than 20,000€, mostly with high levels of education. In order to test these variables, *t student* and ANOVA tests were used to compare the means of both groups. None of these relationships was significant, except for *level of education*, being H1 rejected. In terms of trip related characteristics to Lisbon, the descriptive analysis has shown most of respondents were first timers, staying in average between 1 and 14 days, and travelling for leisure purposes with friends or family. Additionally, the majority of respondents stated they have booked their trip by themselves, or through friends and family. Results have also shown most of these travelers are well travelled, with a high concentration of tourists travelling between 15 to 60 days/year. Even though, ANOVA tests results have shown no significance for any of these variables, being H2 rejected. Social media usage was analyzed in three dimensions: purpose, content and influence. In terms of social media purposes in travel planning context, research has shown it is mostly used at pre and during stages, being mainly used to search for reviews, enquire about the destination and accommodation, but being also used to search insight information about the destination. An EFA was computed in order to investigate any differences between the different moments of travel (pre, during and after travel), clearly presenting differences between them, being H3 accepted. Furthermore, social media was

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analyzed in terms of its content. For most of respondents, social media content is mostly perceived as interesting, useful and trustworthy and less creative and personalized. Bearing in mind the trustworthiness of social media, correlation tests have shown the level of trustworthiness positively influences the usefulness of social media sites, supporting H4. It has also been suggested the higher the trustworthiness of its content, the higher will be the tendency for tourists to make changes in their travel plans, which led to accept H5. Ultimately, H6 was also accepted as the level of trustworthiness has shown to play a positive effect in overall destination image, in this case, for the city of Lisbon. Table 28 shows a summary of all hypotheses tested and its results:

Dimensions	Hypotheses	Variables	Result
Individual characteristics	H1a	Importance given to social media and travel review sites and gender	Rejected
	H1b	Importance given to social media and travel review sites and age	Rejected
	H1c	Importance given to social media and travel review sites and education	Partially Supported
	H1d	Importance given to social media and travel review sites and income	Rejected
Trip characteristics	H2a	Importance given to social media and travel review sites and duration of stay	Rejected
	H2b	Importance given to social media and travel review sites and purpose of visit	Rejected
	H2c	Importance given to social media and travel review sites by level of experience with the destination	Rejected
	H2d	Importance given to social media and travel review sites and travel composition	Rejected
	H3	Social media sites usage and travel planning stages	Supported
	H4	Trustworthiness of social media and usefulness of social media and travel review sites	Supported
	H5	Trustworthiness of social media and change in original travel plans	Supported
	H6	Trustworthiness of social media and tourists destination image	Supported

Table 28 - Summary of hypotheses validation

Chapter VI Discussion and conclusions

Discussion

Several studies have tried to explain the influence of traveler's characteristics in social media engagement in travel planning (Gretzel and Yoo (2008); Cox et al. (2009); Fotis et al. (2012); Xiang and Gretzel (2010)). In order to understand the tourist user profile, both tourist's individual characteristics (gender, age, education and income) and trip characteristics (length of stay, purpose of the trip, number of visits and travel composition) were analyzed in relation to the use of social media in travel planning as well as throughout travel planning stages.

Firstly, according to the results given, traveler's socio demographic characteristics, namely gender, age, income, education and country/region of residence, are different in terms of social media usage. In terms of sample, women are more prominent than men in this study as well as in the importance given to social media in travel planning, supported by Gretzel and Yoo (2008) and Cox et al. (2009) studies, but gender was not a significant variable in terms of importance given to social media and travel review sites. Concerning age, results have shown a higher predominance of younger groups considering more important social media in travel planning, with 18-25 and 26-35 years old preferring social media than elder groups (36-45 and >46), although not showing statistical significance. This is supported by similar studies in social media sites in social media and travel planning, such as Fotis et al. (2012), Xiang and Gretzel (2010) and Moscardo and Beckendorff. (2010) whose sample also shown a prevalence of younger age groups who tend to use social media and UGC sites. The prevalence of a younger age group might be explained by their usage and knowledge of social media. Yoo et al. (2011) stated travel social media users, particularly frequent travel review readers, tend to be younger than 35 years old compared to others who read reviews less frequently. In addition, results are also supported by Rodriguez (2009) who reveals younger users tend to be more influenced by UGC when compared to older generations.

Regarding the level of income, the comparison of means shows users earning average (between 20,000-39,999€/year) and low incomes (>20,000€/year) gave more importance to social media sites in travel planning. This relationship is also not significant. Some studies on social media state individuals with higher incomes tend to spend more time in connected devices (Jansen, 2010), while travel social media users tend to have higher incomes (Yoo et al., 2011). However, a research conducted by Flowtown (2010) shows individual income is

not relevant in terms of social media usage. In this sense, the level of income does not always hold in social media context. Likely in this study, the majority of the respondents were below 25 years old (56%), which may explain also lower levels of income and preference for social media sites. Also, it may be argued Lisbon presents itself as an affordable city when compared to other European destinations, which might explain a younger and cost-minded demand.

None of demographic or socio-economic variables have shown statistical significance in terms of importance given to social media and travel review sites in travel planning, except for education whereas the comparison of means suggests some differences. According to the results given, a higher importance of social media in travel planning is given by respondents with a Professional and High School degree, respectively. More than half of the respondents have a Higher Degree (54%) and Professional degree (41%), representing a highly educated sample. Some research claim the use of Internet, and social media sites, may be related to higher educational level (Lenhart et al., 2010; Duggan et al., 2015). Educational factors were suggested to be relevant to explain the travel information search patterns by Fodness and Murray's (1999) level of education influence in travel information search process. The present study points differences in ANOVA tests between different levels of education, namely, Professional and Higher Degree. Notwithstanding, it may be claimed social media has now become a wide spread online tool, accessible to most of users with Internet access. Also, social media platforms are usually self-explanatory, featuring user-friendly interfaces, which do not demand a high or specialized degree. In this sense, even though there are differences suggested between different levels of education, social media sites may be operated by users with different educational backgrounds in the travel planning process.

In social media literature, most of studies concern travelers' characteristics (socio demographic) while others refer only to the types of online user-generated content travelers access (Simms & Gretzel, 2013). However, the study of the trip-related characteristics has been scarcely researched in social media studies, particularly, the one related to travel industry. Fodness and Murray (1999) claimed trip characteristics such as length of stay, number of destinations visited, accommodation, mode of transportation and expenditure patterns influence tourists travel planning behavior. In this case, although there have been differences between trip characteristics and the importance given to social media, none of tests has produced results with statistical significance.

In terms of length of stay, tourists staying less than one day and over 14 days considered social media and travel review sites more important in their travel planning. Hence, although there were differences among the length of trip, it appears there is not statistical difference in terms of engagement with social media sites, which is supported by Simms (2012).

With regard to the purpose of trip, results have shown the importance given to social media and travel review sites varies according to the purpose of trip. Surprisingly, in this case, business and VFR tourists claim to give more importance to social media sites in travel planning than leisure travelers. According to Fodness and Murray (1999), tourists travelling for vacation/leisure purposes were more likely to rely on their personal experience in travel planning. In this case, leisure tourists considered travel websites, own experience and travel review sites as the most important sources in travel planning, respectively. Although Murphy et al. (2007) stated leisure tourists tend to value more other travelers' experiences than VFR travelers, this study suggests this condition does not hold for the case given. Even though VFR tourists commonly obtain the necessary information from their friends to plan their travels, reporting a lower usage of social media (Murphy et al., 2007), they are still active users of these platforms for other purposes. Additionally, the fact that VFR tourists considered social media more important than leisure travelers might be related to its usage to communicate with friends and relatives at the destination (Yoo & Gretzel, 2012). In this sense, it appears leisure tourists considered sources such as travel websites (due to their functional features of immediate booking and purchase), own experience (previous visit or knowledge of a certain destination), and travel review sites (another form of social media, e-WOM) more important than pure social media sites, such as Facebook, Twitter or Youtube, even though these have an indirect influential role in tourist's travel decision making, supported by Yoo and Gretzel (2012). On the other hand, business tourists attribute higher importance to social media sites, but also travel review sites, own experience and friends and relatives. This might be explained by the fact most of travelers enquired were young (89% are under 35 years old), being independent business travelers, which tend to organize the trip by themselves (78%), and also spending free time at the destination, which led them to use other information sources, commonly associated to leisure tourists. Also, other factors such as the availability of online touristic information as well as the restriction of access of certain networks in countries like China or Korea might also influenced tourist's sources preferences.

In terms of number of visits to destination, results have show slight differences between the means of the two groups analyzed (first timers and repeaters). It appears first time tourists

in Lisbon gave more importance to social media and travel review sites than repeater travelers, although this relationship has shown no statistical significance. This is supported by Simms and Gretzel (2013) findings that travelers rely on existing information, particularly UGC content, when visiting a destination for the first time. In this sense, it could be suggested first time tourists have less familiarity with the destination, and therefore, travel reviews, comments or posts may provide insight information about the destination. It appears social media is not used as a sole source in travel planning, but in combination with other sources, which is consistent with Cox et. al (2009) findings. Also first timers tend to rely on existing information about the destination, where user generated content sources, such as travel review sites, are one of them (Simms, 2012). The fact that own experience is less relevant in their trip to Lisbon than in general planning might be due to a greater part of respondents (83%) stated being first timers.

Concerning the travel composition, results have shown differences in the means between comparable groups, yet not statistically significant. Tourists travelling alone, with others and with friends gave more importance to social media. It is therefore supported by Fodness and Murray's (1999) research, which claims there are differences in traveler's engagement with information sources according to the travel party composition. Past literature also mentioned families use media more than other types of travel accompany parties, as they want to assure the satisfaction of all members (Gitelson & Crompton, 1983). However, it seems to contradict Simms (2012) findings that solo travelers generally use less user-generated content in travel planning as they are only responsible for their own satisfaction. Although these results seem to be contradictory, they are supported in similar studies on the influence of travel party composition and the presence of friends and relatives in travel planning (Snepenger et al., 1990; Cox et al., 2009; Fotis et al., 2012; Gretzel et al. 2006). Also, 78% of travelers made travel arrangements by themselves while 15% through friends and relatives. In this case, it might be argued most of tourists travelling alone and with friends will tend to use social media more often to search for reviews, comments and recommendations from friends and relatives rather than families which might have used other sources.

Secondly, the usage of social media throughout the travel planning process has also been analyzed. Initially, three stages were considered: pre during and after the trip. Following Cox et. al (2009) framework, each stage comprised several items, aiming to understand the specific purposes of social media usage throughout trip planning. In this sense, and not

surprisingly, social media sites are more used in pre and during stages, which is supported by Cox et.al (2009). Furthermore, results confirm social media is mostly used to search reviews and enquire about the destination, being more frequently used at pre-destination choice stage rather than post destination selection (Cox et.al, 2009). Social media is also used during trip stage, mostly to search particular information about the destination and stay connected with friends and, in a less extent, after the trip, which refutes Fotis et.al (2012) findings. Additionally, tourists have also updated their own social media platform, although in a less extent, as they are likely to spend their time visiting the destination onsite rather than spending time online (Fotis et. al, 2012). Following this, social media assumes a preponderant role in destination decision choice, consistent with Yoo and Gretzel (2012) findings.

It appears respondents tend to use a wide range of travel information sources instead of one, which is consistent with Jeng and Fesenmaier (2002) and Fotis et. al (2012) researches. It could be argued the prevalence of travel websites might be explained by a common associate of “travel planning” to the actual “travel purchase”, and therefore considering booking websites as primary sources in their travel information search. With regard to travel planning, internal sources are commonly used as first hand sources due to their proximity and ease of use (Fodness & Murray, 1999). Following this, these results reflect same conclusions from other studies (Fotis et al., 2012; Litvin et al., 2008; Murphy et al., 2007) whereas friends and relatives are one of preferred sources during travel planning. Travel review sites are also among the preferred travel sources which is consistent with the literature (Fotis et. al, 2012; Schmallegger & Carson, 2008; Leung et al. 2013).

In the survey, social media sites were separated from travel review sites, as there were significant differences in their usage and purpose (Yoo & Gretzel, 2012). While travel review sites were developed with the specific purpose of sharing travel content, social media sites are linked a broader usage and user-features (sharing, chatting, querying, etc.). However, in this case, social media sites appear not to play a crucial role in general travel planning. This fact might be due to the unawareness of social media when planning a trip (e.g. when getting inspiration for a next trip) or their lack of knowledge of social media sites utility in travel information search. Travel websites are the most prevalent source in information search, but pure social media sites (Facebook, Twitter, Youtube, etc.) are also used in online travel searches, which is consistent with Yoo and Gretzel (2012) study. In addition, for some users social media sites are perceived a way to communicate with friends rather than search for information (Carrera et al., 2008). Hence, tourists might use social media indirectly as a

contributory source, which ultimately will contribute to information search (Fodness & Murray, 1999). Lastly, printed media, official tourism organizations (DMOs) and tour operators/travel agencies were classified among the least important sources. Contrarily to Cox et. al (2009) findings, most of respondents stated official sources were less important, which might be due to a very low association or knowledge of official sites of each destination, or to its low usage.

Thirdly, one of the study objectives was to analyze how social media content is perceived by tourists and its level of influence in travel plans and destination choice. Results have confirmed social media content it is likely to be perceived as interesting, useful, trustworthy, updated, reliable and creative. As mentioned before, there is limited research and frameworks regarding the content analysis of travel social media. Notwithstanding, it does confirm Fotis et. al (2012) findings of social media content being more trustworthy than traditional media sources (mass media, official tourism organizations, etc.). In addition, it is also supported by Yoo et al. (2011) and Chung and Koo (2014) studies whereas social media content is considered a reliable source of travel information. At the same time, it partially contradicts Cox et. al (2009) as social media and reviews (or UGC sites) are considered less trustworthy than other sources of travel information, such as official sources.

Yoo et al. (2009) stated trust in UGC content would increase its usefulness to tourists in their travel planning. In order to sustain this idea, a correlation test was applied, using Spearman's coefficient. Results have shown there is a positive correlation between these variables, whereas the increasing trust in social media content has positive direct effect on the usefulness of social media and travel review sites. Hence, this was confirmed with statistical significance and trustworthiness of social media content has a determinant role in social media usage for travel purposes.

In terms of social media influence in holiday travel plans, results have also shown a positive correlation between trustworthiness of social media content and the actual change in original travel plans. In this study, respondents were asked at what extent they would change their travel plans, considering the information they have read in social media sites. More than half of respondents using social media (65%) stated they made a few or significant changes in their original plans, after they used social media for travel purposes, supported by Fotis et. al (2012). In this sense, it also confirms the increasing trust in social media content will have an impact on tourist travel behaviors, particularly their travel decisions (Yoo et al. 2009).

Lastly, the influence of trustworthiness on the destination image was analyzed. In the case given, destination image was measured through eight items adapted from Baloglu and McCleary (1999) destination image assessment framework, which were aggregated into one single variable (Lisbon destination image). Results have shown a positive correlation between social media content trustworthiness and destination image. Bearing in mind social media is mainly used in pre and during stages of travel planning, it may be argued the destination perception from social media is mostly based on pre purchase images (Walmsley & Lewis, 1984). In addition, most of respondents stated they use more than one information source in their travel planning, which eventually have also influence their assessed image of the place (Molina et al., 2010). In this case, tourists were asked about their destination perception at the time of their actual trip. Concerning Lisbon destination image, most of respondents stated their perception about the city was very positive, had a good overall travel experience and they would recommend to friends and relatives. Also in terms of attractions/accommodation and value/environment has matched the expectations of these tourists, which has generated a relatively positive image of the destination enquired, which is supported by Luo et. al (2004).

Bearing these results in mind, Portuguese DMOs online promotion has also been analyzed. For the specific case of Lisbon, results stated official DMO sites are significantly used in primary travel searches. Concerning the current existent Portuguese DMOs sites, Visit Portugal and Visit Lisboa homepage websites are currently the most well known sites, followed by their respective Facebook pages. Other sites, such as Twitter, Youtube and Pinterest pages, are still unknown for most of tourists. These types of social sites present limitations in terms of features. Twitter is a micro-blog with limited shared content, and may not be very used in travel information search. In case of Pinterest, the fact that is less popular than other photo sharing networks (e.g Myspace, Instagram, Flickr) may explain its low usage in travel planning. When analyzing in terms of features, information provided, easiness of use and updated contents are currently the most valued items. From user's perspective, it appears the quality of information is the most important dimension. Moreover, tourists who have used these platforms also value updated contents, the format of each site and the trustworthiness of the information provided, in particular, on their official websites and Facebook official pages. Nevertheless, most of respondents stated Portuguese DMOs sites lack a number of features, such as the ability to communicate with others. This appears to be quite relevant when analyzing the communication between users of these platforms as well as with these companies.

When looking at site content, most of respondent agreed Portuguese DMOs social media sites provide general information and would recommend to friends and family. This appears to be particular relevant in assessing a DMO promotional role and their rate of usage among tourists (Choi et al. 2007). Besides information, it seems photos and videos of the destination are also important, as they showcase the destination, and insight information, which are provided by both official entities and users own comments and reviews. On the other side, special campaigns and promotional offers appear not to be featured in these sites.

Research contributions

Both tourist and trip data helped to better understand the type of tourist that uses social media in travel search, and how to better address this target by suggesting further marketing solutions for promoting organizations, in particular, DMOs. Social media content is often perceived as important in travel planning, although it is more a contributive source rather than a decisive one in travel information search, whereas travel websites and own travel experience are still predominant. It therefore confirms UGC content is not used as a sole information source but rather in combination with others, perceived as add-on rather than a substitute of existent travel sources (Cox et al., 2009).

With regard to social media content, several contributions have also been made. Not only social media content is highly perceived as trustworthy and reliable, but also has significantly contributed to change original travel plans. Additionally, it was seen the higher level of trustworthiness led to a positive destination image, highlighting the impact of visual and written online content presented in these platforms. Lastly, the data collected about Portuguese DMOs online sites allowed to understand the user opinion about these platforms. The aim of this study was to combine both quantitative data (tourists' opinions about DMOs sites) with qualitative research (interviews to DMOs) and further enhance the role and potential of these organizations in destination promotion. Hence, this study provides valuable insights which will help DMOs to build solutions for social media.

Managerial Implications

This study has provided a number of relationships regarding the social media usage by tourists in the travel context

Firstly, with regard to the importance given to social media and travel review sites in general travel planning, results have shows social media users for travel planning are commonly female, young, with higher degrees of education and average annual incomes.

However, the lack of statistical significance encountered may suggest there is not a single profile of user when concerning to social media. In this sense, companies and DMOs, should address their users in a transversal way, promoting to a major audience but also creating messages for smaller niche groups. Bearing in mind tourists and trip characteristics, these organizations will be able address more specifically these groups in the same way.

Secondly, the social media usage throughout travel planning. In this case, results have shown social media tend to be more used in pre travel, for searching reviews and enquire about destination or accommodation, and during trip, to search for particular information at the destination. In fact, pre travel online search is more frequent than during and post trip stage. In addition, DMOs social sites are visited at an early stage of pre travel planning (Choi et. al, 2007), which may lead these organizations to provide contents as reviews or insight information that would help in destination choice. However, a large number of tourists also engaged in after trip activities, particularly, sharing information and online contents and travel reviewing (Fotis et. al, 2012). Ultimately, DMOs would be able to know why and when tourists use social media, and understand at which stage of decision they would use more frequently. For DMOs, this could also represent an opportunity to attract tourists after travel, instilling the creation of online communities and as well building destination reputation and positive reviewing in social networks.

Thirdly, the quality and accuracy of travel content and its influence on social media usage and travel plans. In this study, most of respondents have classified social media content about Lisbon in six different items (trustworthiness, reliability, utility, interest, actualization and personalization). Interest, Utility and Trustworthiness were the items with higher classification, while Personalization and Creativeness of social media content were less ranked. Furthermore, most of tourists stated social media content has led them to make a few or significant changes in their original travel plans. This shows tourists actually tend to rely on social media content to make travel decisions. DMOs should therefore pursue to increase the quality of online content posted in social media sites. Choi et. al (2007) states tourists might use destination websites throughout travel planning, although their information content needs may vary according to decision levels. Concerning the specific case of Portuguese DMOs, none of them had a clear social media strategy or department to manage the content posted or uploaded. In addition, DMOs sites are commonly non commercial sources, where tourists search for official information about the destination. Bearing in mind the results given

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by this study, Table 29 shows potential solutions for DMOs in terms of content, interactivity, navigation, usability and management:

Social Media Sites	Current Gaps	Solutions for Portuguese DMOs social media sites
Content	Poor contents.	Improve the quality and trustworthiness of information provided, photos and videos across all social media sites.
	Lack of information consistency.	New layout and contents listing sorted by subject (General information, accommodation, Places to visit, etc.) in a easy and readable format.
	Very little insight information.	Increase insight information by engaging users to contribute with comments and replies.
	Outdated content with a few numbers of external links.	Regular update of contents on every social media site.
Interactivity	Limited features on Facebook, Twitter and Youtube.	Increase plug ins such as trip planners, search engines, booking systems.
	Low interactivity between users.	Popularize the use of hash tags such as #lisbon or #visitlisbon on Facebook, Instagram and Twitter.
	No booking or payment options through social media.	Direct links through homepage to Tripadvisor and other review sites.
		Increase promotions and special events for social media users only.
		Flash campaigns and contests/quizzes via social media.
	Increase communication through posts, comments and replies on each site.	
Navigation	Easy navigation, yet low connection to external sources.	Increase ease of navigation through content listings.
	Most of social media sites only available in English.	Increase number of languages available up to a minimum of three.
Usability	Limited usage of some social media sites (Pinterest, Instagram, and Twitter).	Increase usage of less used social media sites through promotion and update feed, in particular Pinterest and Youtube.
	Homepage websites are not presented in an useful format.	Reconfigure website into a more useful format, easy to use and efficient.
Management	No current social media strategy.	Establish a cohesive online marketing strategy, including DMO website and social media presence and its partners.
	Lack of maintenance of social media sites.	Evaluate the ROI of each social media site and their applicability for the destination.
	Reduced number of staff to deal with social media enquiries.	Increase and allocate a sufficient number of people to deal with social media enquiries, posts and operational procedures.

Table 29 - Potential solutions for DMOs social media sites

In this sense, the main objectives for DMOs to increase their social media presence shall be: (i) remodel homepage website (current websites are outdated, hard to navigate and lack direct links to social media online sites); (ii) increase visibility of social media sites through homepage website (by including direct links to increase number of fans, views and news feed within each social media site); (iii) establish a strong presence in the main social media sites used (Facebook, Twitter, Instagram, Pinterest and Tripadvisor); (iv) increase interest by promoting different marketing campaigns such as contests, promos, events and quizzes on a regular basis; (v) increase utility by providing additional options in social media sites (booking systems, weather forecasts, events schedule), avoiding customers to leave the social media site; (vi) increment trustworthiness and reliability by incorporating travel reviews on each online site. Provide reliable information and visual content such as photos and videos. Shared links with Tripadvisor, Youtube and other social platforms. Create buzz through sharing features of posts, comments and comments reply in a timely manner; (vii) promote actualization of contents by regularly updating social media platforms and provide updated travel information; (viii) increase personalization of travel contents by addressing social media user's needs. DMOs provide a wide variety of contents, including accommodation, attractions, destination general information, etc. In this sense, social media sites should cover each tourists needs segment, from leisure and recreational tourism to business travel through specific promotions, thematic events online and specific online campaigns; (ix) foster creativeness of social media contents. Some of Portuguese DMOs platforms are currently outdated or missing information. Online contents are presented in a very standard format, both in their homepage websites as well as in Facebook and Twitter pages. Youtube Channels and Pinterest accounts are not currently being used or being out of date. Hence, DMOs could provide information in a more creative way, for example, through the usage of new social media sites, website co-creation through customer's recommendations and reviews of places, promote online competitions between users and an active Instagram account with related hash tags (#), showcasing the destination through users' photos and comments; (x) additional additions: travel review rating systems (Tripadvisor), direct links to social media sites on DMOs homepage website and the creation of a trip planner with photo sharing. By knowing its customer's needs, DMOs can provide online information through social media more efficiently and economically; (xi) creation of a mobile travel app for tourists in Lisbon, compatible with most of mobile devices, for a more active usage of DMOs information for tourist's on-the-go.

In this sense, these solutions will help destinations organizations to better allocate resources and take better decisions in terms of their online marketing presence. In this case, investing in social media presence appears to be paramount for tourism promoters as a way to not only increase the number of visitors to these sites but also to establish better customer service practices.

Limitations of the study

This study had some limitations regarding the research process and sample. Firstly, the study was limited to the city of Lisbon, as the aim of this project was to analyze tourist perception of DMOs social media sites and forecast potential solutions on this specific context. The study has comprised two different types of research, a survey to tourists and interviews to two different DMOs. The sample used in this study was limited in a sense that only foreign tourists (none Portuguese) using social media on a regular basis, were questioned. Data were firstly collected through online surveys, although with a very low rate of response, and on-site, through face-to-face. In addition, the survey was limited to two different touristic areas (Chiado and Belem) in the city of Lisbon. In this sense, it cannot be generalized for all the population of foreign tourists who visited Portugal, as it is focused in one sole destination, and not considering the differences between destinations in terms of social media usage and information access. Also the level of expertise of social media varied between respondents, which have also influenced the response rate of some questions.

The survey was initially created in English in order to get a larger sample, although some respondents were not able to understand some questions which required some assistance. Secondly, image of the destinations may vary throughout seasons. As this study took place in winter season, the perception of destination might not the same to other times of the year. Thirdly, the surveys applied during the tourist travel consumption (the actual trip to Lisbon). As perceptions of product/service vary across purchasing stages, results might have been different in an after trip context whereas respondents can recapitulate the whole experience. Furthermore, the interviews conducted to Portuguese DMOs (*ATL* and *ERT-RL*) have revealed limited information regarding the use of social media by these entities as it appear to be a recent introduced marketing practice. Also, the interviewees have shown limited knowledge of social media operations. The fact some social media sites are not currently working has also limited the data collected.

Recommendations for future studies

The results given provide important contributions in the travel research filed. This study comprised a research analysis of tourists' information needs and usage of social media in travel information search, along with the analysis of Portuguese DMOs online marketing practices. In this sense, it fosters opportunities for DMOs to adopt some of the solutions suggested, which can be replicated to other destinations. Ultimately, other comparative studies (e.g. study on each social media site ROI) could also be developed to better understand the role and impact of social media in travel planning.

In terms of the survey, questions were built based on a combination of different theoretical frameworks rather than a single one, due to the lack of specific frameworks for the use of social media sources in travel planning. A practical data approach was adapted to collect results that could support solutions for DMOs social media implementation. Hence, it is recommended to develop a framework which could be replicated across different countries and maybe used to different types of social media.

Results might have been influenced by particular sample characteristics. The prevalence of a younger group age might have limited results as it was suggested they are more familiar with social media. In addition, there is a current misperception of social media usage for travel planning purposes, as most of tourists do not identify general social media sites, such as Facebook or Twitter, as crucial sources in their travel planning, except for Tripadvisor, which is highly recognizable and used in the travel context. Trip characteristics, although they did not show statistical significance, they appear relevant to explain the travel search behavior. First time tourist will tend to use social media sources more often, which will have a determinant impact on their destination perception upon arrival. In this sense, future studies should include a larger sample of these travelers, allowing them to better compare tourists' information needs according to the experience of travel.

Lastly, one further area for future research is the study of other information sources and their role in travel planning. Social media has proved to be used predominantly in the pre travel stage for information purposes. Further research may enhance online travel behaviors in the pre planning stage, as well as during and after travel. As seen before, social media plays an influential role in holiday travel plans. Future studies are recommended to investigate the reasons beyond this influence and how it influences destination selection.

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Appendices

Appendix 1: Tables

Table 30 - Type of UGC sites

Types of UGC sites	Description
Social network sites	<p>According Boyd and Ellison (2008:211), social network sites “are web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection and, view and traverse their list of connections and those made by others within the system”.</p> <p>Facebook is the most popular social networking site (Facebook, 2014) and one of the most complete, allowing users to create a profile, connect with friends, share content (photos, videos, links), create groups, events and personal pages. It is also attractive for companies as they allow to interact with customers via applications, groups, events or fan pages. Different social media sites have different purposes. LinkedIn (for business networking) and MySpace (to share music content) are other relevant social network platforms.</p>
Blogs	<p>Blogs are online platforms to write short stories, named posts. In addition to company’s website, they represent a potential voice on a specific subject, to speak to current and potential customers, enabling a more close contact between the company and customers (Zarrella, 2010). Blogs feature comments, <i>blogrolls</i>, reposts and subscriptions. Popular websites such as Blogger, Wordpress and Hubspot are types of blog-editing platforms.</p> <p>One of most popular blogs is Twitter. Twitter is a microblog, which allows only 140 characters per post. Most of companies use this platform as it is a simple process, requires low investment and creates buzz and consumer insight (Zarrella, 2010). Using <i>hash tags</i> (#), it allows to identify a topic through keywords and creates a subject library within the platform, which can be viewed by other users.</p>
Media sharing sites	<p>Media sharing sites are common platforms that allow users to create and upload multimedia content. Videos can be uploaded by users (user-generated content) through any different media appliances (mobile phones, digital cameras) and share them with their friends and other anonymous users (most of users are not members).</p> <p>Youtube is the most used multimedia-sharing site and third most visited site on the Internet (Zarrella, 2010). It consists of a video-site sharing where users can upload videos and share them with thousands of users. Youtube represent a great strategic marketing tool to promote video commercials as well containing links to company website and products, and allows to interact with customers in a informal manner.</p> <p>Instagram is another popular photo and video sharing application that allows apply filters to photos and videos in a Polaroid style and share them in own social feed or among other social networks such as Facebook, Twitter, Foursquare and Tumblr. Owned by Facebook, Instagram was introduced in 2010 and it is now one of the most popular social sharing sites after Facebook (Facebook, 2014). However, Instagram has positioned itself not only a snapshot sharing platform but a strategic online channel to engage customers. According to Lutrell (2014), companies use Instagram to promote their products, services and culture by sharing photos in an intimate yet informal way. In addition, Instagram allows to create a media library of photos and videos related</p>

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to one or more specific topics, recurring to the use of *hash tags* (#). Instagram is also a sharing app with interfaces to the most popular social networking sites. Other popular media sharing sites are Flickr, Tumblr and Slideshare.

Ratings and reviews sites are common platforms where consumers discuss and relate to other consumers, whether proving opinion and feedback of certain good or service or collecting information. While other users of social media are more into socializing, review sites visitors are looking for privileged information for their next purchase. Even though reviews and ratings are commonly a reliable source of experimental nature of a certain product or service, subjective comments tend to be biased (Zarella, 2010). It is also a valuable marketing tool as it provides consumer insight information and free feedback from existent customers.

Tripadvisor is one of the most used review sites in travel market. It consists of an online platform that provides information regarding travel services (hotels, restaurants, attractions) from previous users' experience. This site also allows to rate tourism facilities in different features (location, service, value, etc.), compare with similar options, check users photos and reviews, and ultimately make reservations and bookings. On the other hand, new features were also introduced (for example, companies are able to respond to users comments, assisting in customer queries and avoiding criticisms).

Source: own

Table 31 - Roles of DMOs

Roles of DMOs	Description
Leading and coordinating	Manage stakeholders interests in the destination, act both intermediary and regulator of all elements of a destination (attractions, accessibility, infrastructures, destination image and legal issues).
Creating a suitable environment	Create and provide all physical and additional infrastructures (hotels, attractions, facilities), qualified human resources, technology and systems. Regulate and implement sector policies, including governmental programs to promote sustainable tourism development. Support and foster destination tourism companies and promote tourism development.
Delivering on the ground	Assure the quality of services provided within the destination. Managing tourists experience and ensure expectations are met.
Marketing	Promote destination. Manage destination image through media resources (campaigns, promotional videos, events). Facilitate travel bookings and promote customer relationship overseas.

Source: adapted from A Practical Guide to Tourism Destination Management, UNWTO (2007)

Appendix 2: Figures

Figure 1 - Model of consumer decision making in tourism (Swarbrooke & Horner, 1999) - adapted

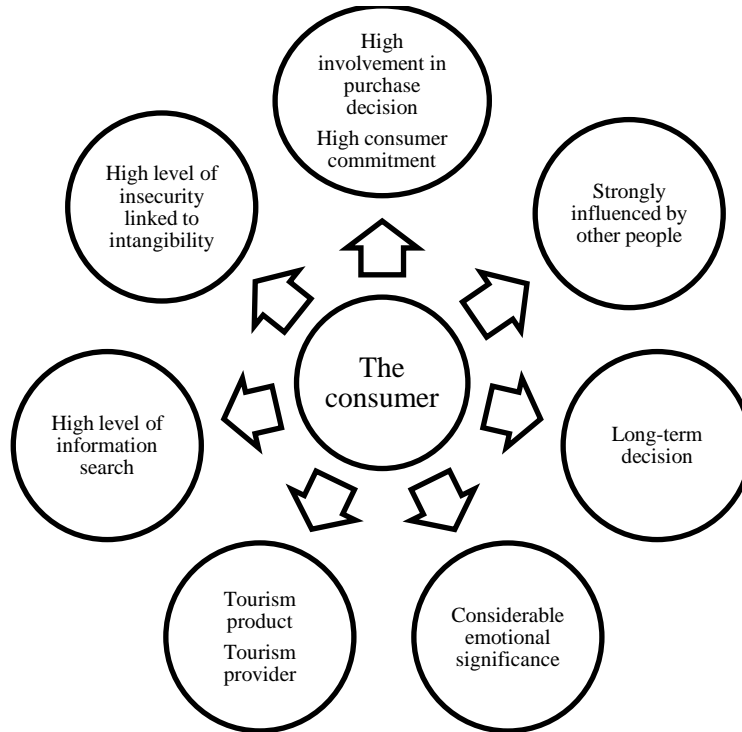


Figure 2 - The travel planning process (Cox et al., 2009:745)

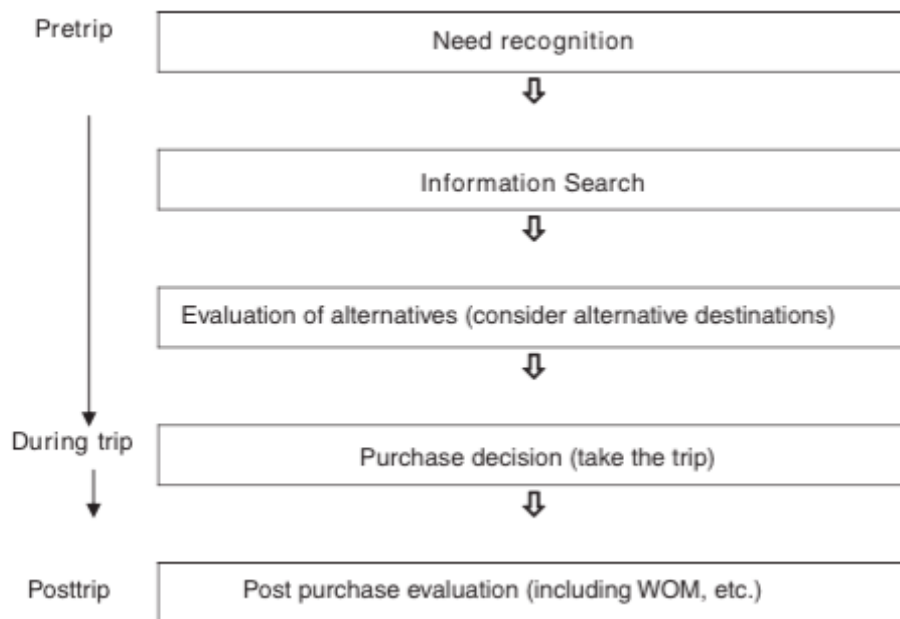


Figure 3 - Model of Travel-Buying Behavior (Mathieson and Wall, 1982) - adapted

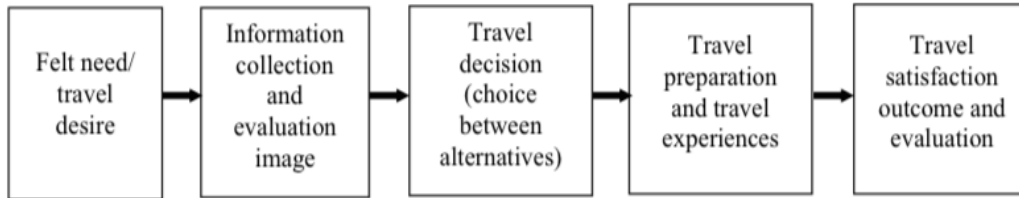
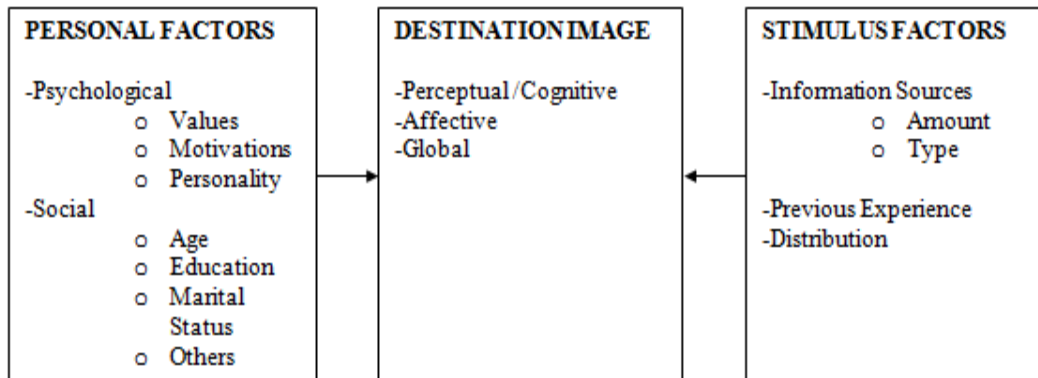


Figure 4 - Model of Destination Image (Baloglu & McCleary, 1999:870)



Appendix 3: Survey

This survey aims to understand your social usage in travel information search and holiday planning. This survey is anonymous and confidential. Approximate time is 5 minutes

- PART I includes several questions regarding your holiday planning and information sources.
- PART II refers to the usage of social media in our actual trip to Lisbon.
- PART III is about your knowledge about official tourism organizations (DMOs).
- PART IV is about yourself.

PART I – General holiday planning and information search

1. Which are the most important information sources when planning your trip abroad? (1=not important to 5=very important) (NOTE: "Planning my trip" includes pre, during and post trip stages)

Items	1	2	3	4	5
- Official tourism organizations (DMOs)* (e.g. Visit Britain, Visit Sweden, Visit Portugal, etc.)					
- Travel websites (e.g. booking.com , trivago.com)					
- Social media sites (e.g. Facebook)					
- Travel review sites (e.g. Tripadvisor)					
- Tour operators/travel agencies					
- Printed media					
- Friends and relatives					
- Own experience (previous visit)					

*DMOs (Destination Management Companies) are public, non-profit organizations, responsible to promote tourism in a specific place/country. Examples: Visit Britain, Tourism of Queensland, Office du Tourisme de Paris, etc.

2. For what purposes do you use social media sites when planning your trip abroad? (1=never to 5=always)

Items	1	2	3	4	5
Pre travel					
- To collect particular information only available online (tips, events, photos, etc.)					
- To enquire about the destination, accommodation, restaurants, etc.					
- To search for specific campaigns and offers					
- To search for reviews of hotels, restaurants, attractions					
- To compare travel alternatives and narrow down my choices					
During travel					
- To update my own social media platform					
- To stay connected with friends					
- To search for particular information at the destination					
Post travel					
- To share my experiences, photos and videos with others					
- To write travel reviews and recommendations					
- To get inspiration for my next travel					

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PART II – Your actual trip to Lisbon

3. Which were the most useful information sources when planning your trip to Lisbon? (1=not useful to 5=very useful)

Items	1	2	3	4	5
Official Portuguese tourism organizations (DMOs*) (e.g. Visit Lisboa. www.visitlisboa.com Visit Portugal, www.visitportugal.com)					
- Travel websites (e.g. booking.com , trivago.com)					
- Social media sites (e.g. Facebook, Twitter, Youtube)					
- Travel review sites (e.g. Tripadvisor)					
- Tour operators/travel agencies					
- Printed media					
- Friends and relatives					
- Own experience (previous visit)					

4. Which social media sites did you use the most when planning your trip abroad? (1=never to 5=always)

Items	1	2	3	4	5
Facebook					
Google +					
Twitter					
Independent travel blogs					
Youtube					
Instagram					
Pinterest					
Tripadvisor					

5. When compared to traditional information sources (press, TV, travel agencies), how would you evaluate the information in social media sites about **Lisbon?** (e.g. 1- Untrustworthy / 5- Trustworthy)

	1	2	3	4	5	
Untrustworthy						Trustworthy
Unreliable						Reliable
Useless						Useful
Uninteresting						Interesting
Conservative						Creative
Impersonalized						Personalized
Outdated						Updated

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6. Before you made your final decision, has social media content (photos, videos, reviews, etc.) influenced your travel plans in your trip to Lisbon? (please select among the options below)

Items	
I am not sure if I made any changes to my original plans	
I did not make any changes to my original plans	
I did make a few changes to my original plans	
I did make several changes to my original plans	

7. Concerning your visit to Lisbon, please choose among the most agreeable option (1=strongly disagree; 5=strongly agree)

Items	1	2	3	4	5
- It has a high number of interesting attraction and activities					
- It has a high number of high quality restaurants					
- It offers a wide range of accommodation options for everyone					
- It is a safe travel destination					
- It is affordable					
- It is hospitable					
- It provides a good overall travel experience					
- I will definitely recommend to my friends and relatives					

8. Overall, how would you classify your visit to Lisbon? (Please select among the options above)
 __below my expectations __according to my expectations __above my expectations

PART III – Official tourism organizations (DMOs) online promotion

9. How often do you use official tourism online sources (e.g. Visit Britain, Visit London, Visit Portugal)? (1=never to 5=always)

1	2	3	4	5

10. Do you know any of the following Portuguese official online sites? (Please select among the options below)

__ Visit Portugal official website (visitportugal.com)	__ Lisbon Tourism website (visitlisboa.com)
__ Visit Portugal Facebook Page	__ Visit Lisboa Facebook Page
__ Visit Portugal Twitter Page	__ Visit Lisboa Twitter Page
__ Visit Portugal Youtube Channel	__ Visit Lisboa Youtube Channel
__ Visit Portugal Pinterest Page	__ Visit Lisboa Pinterest Page
__ None	

*(if you answer **NONE**, please move to **PART IV**. Thank you.)*

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11. During travel planning, what is your level of satisfaction regarding Portuguese official organizations (DMOs) online sites features? (1=not satisfied to 5=very satisfied)

	1	2	3	4	5
- Information provided (text, image, video)					
- Trustworthiness of social networking information (reviews, posts, comments, etc.)					
- Organization and visual design (layout, feed publications)					
- Useful format					
- Easiness of use					
- Updated contents					
- Navigation support (language translator, content listings, direct links)					
- Ability to communicate with other users					
- Privacy settings					

12. Considering your previous knowledge about the destination, and based on your actual stay in Lisbon, how would you classify the following content information in Portuguese DMOs online sites? (1=strongly disagree to 5=strongly agree)

	1	2	3	4	5
- It provides general information (accommodation, restaurants, attractions)					
- It provides special campaigns and promotional offers					
- It provides accurate travel reviews and personal experiences					
- It provides quality photos and videos of the destination					
- It provides insight information (tips, local places, special events, etc.)					
- It regularly posts of interest and comments					
- It provides good feedback and customer replies					
- I will definitely recommend to my friends and relatives					

PART IV – ABOUT YOURSELF

13. ABOUT YOURSELF

Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female
Age	<input type="checkbox"/> 18-25 <input type="checkbox"/> 26-35 <input type="checkbox"/> 36-45 <input type="checkbox"/> 46-55 <input type="checkbox"/> 56-65 <input type="checkbox"/> >65
Level of education	<input type="checkbox"/> Elementary <input type="checkbox"/> High School <input type="checkbox"/> Professional degree <input type="checkbox"/> Higher degree
Country of residence	
Annual house income	<input type="checkbox"/> < 20,000€ <input type="checkbox"/> 20,000€-39,999€ <input type="checkbox"/> 40,000€-59,999€ <input type="checkbox"/> 60,000€-79,999€ <input type="checkbox"/> > 80,000€

14. JOURNEY INFORMATION

Duration of the stay	<input type="checkbox"/> <1 day <input type="checkbox"/> 1-3 days <input type="checkbox"/> 4-14 days <input type="checkbox"/> >14 days
Frequency of travel (year)	<input type="checkbox"/> < 15 days / year <input type="checkbox"/> 15-30 days / year <input type="checkbox"/> 31-60 days / year <input type="checkbox"/> > 60 days /year
Purpose of visit (please select ONE)	<input type="checkbox"/> leisure <input type="checkbox"/> business <input type="checkbox"/> visiting friends and family (VFR)
Type of visit	<input type="checkbox"/> First time in Lisbon <input type="checkbox"/> repeater
With whom you're are travelling with:	<input type="checkbox"/> Alone <input type="checkbox"/> With friends <input type="checkbox"/> With Family <input type="checkbox"/> With others
How did you book your trip:	<input type="checkbox"/> by myself <input type="checkbox"/> tour operator/travel agency <input type="checkbox"/> through friends/relatives <input type="checkbox"/> company

Appendix 4: Interview protocol

- Name of DMO
- Name of interviewee and respective department

PART I - Introductory questions

1. What is the role of your organization?
2. What are the objectives of your organization in tourism promotion in each region?
3. What is the structure of your organization?

PART II - Online marketing strategy

4. Does your organization have a specific marketing department?
5. Does your organization currently have an online marketing strategy? How would you describe it (briefly)? When did it started do develop it?
6. To which particular markets is online marketing aiming at? Are you currently using online marketing in those markets?
7. Comparing to traditional marketing tools (Tv, media ,press), would you consider more important online tools or traditional ones?
8. In terms of online marketing, which online promotional tools are being used? Which one would you consider more important for destination promotion?
9. What is the total budget dedicated to marketing? Within the marketing department, how much is allocated to online promotion (% of total marketing initiatives)? What do you compare to previous years?

PART III - Social media in destination promotion

10. Does your organization currently have a social media strategy? How would you describe it (briefly)? When did it started do develop it?
11. Is the online & social media management a separate part from marketing department?
12. What social media tools are currently being used (Facebook, Twitter, Youtube, etc.)?
13. In what extent social media integrates in the existent online marketing strategy? What would you consider the main constraints in integrating social media in your organization's marketing strategy?
14. How many people are responsible for online promotion in your organization? From these, how many are currently involved in social media sites management?
15. What are your customer management practices your organization uses in social media sites? Is there anyone allocated to respond to customer queries? How long does it normally takes?
16. What would you consider the main pros and cons of social media usage by your organization?
17. How do you measure the social media effectiveness? (ROI, number of likes, number of viewers, comments and shares)
18. What types of functionalities (posts, events, pages, videos) do you think attract most users/ viewers (please provide examples)? Are the current functionalities being effective?
19. How would you consider the importance of social media for Lisbon as destination?
20. What have been the biggest successes and failures in terms of social media at ERT-RL?
21. What are the main challenges in social media strategy in the next 3/4 years?

Appendix 5: Sample characteristics, SPSS outputs

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	87	43,5	43,5	43,5
	Female	113	56,5	56,5	100,0
	Total	200	100,0	100,0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	112	56,0	56,0	56,0
	26-35	59	29,5	29,5	85,5
	36-45	19	9,5	9,5	95,0
	46-55	9	4,5	4,5	99,5
	56-65	1	,5	,5	100,0
	Total	200	100,0	100,0	

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School	11	5,5	5,5	5,5
	Professional Degree	82	41,0	41,0	46,5
	Higher Degree	107	53,5	53,5	100,0
	Total	200	100,0	100,0	

Region of the world

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	North & Central Europe	72	36,0	38,7	38,7
	Eastern Europe	6	3,0	3,2	41,9
	Southern Europe	30	15,0	16,1	58,1
	North America	13	6,5	7,0	65,1
	Central & South America	27	13,5	14,5	79,6
	Asia & Oceania	38	19,0	20,4	100,0
	Total	186	93,0	100,0	
Missing	System	14	7,0		
Total		200	100,0		

Annual income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<20000	92	46,0	50,8	50,8
	20000-39999	30	15,0	16,6	67,4
	40000-59999	34	17,0	18,8	86,2
	60000-79999	9	4,5	5,0	91,2
	>80000	16	8,0	8,8	100,0
	Total	181	90,5	100,0	
Missing	System	19	9,5		
Total		200	100,0		

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Country of residence					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		14	7,0	7,0	7,0
	Australia	1	,5	,5	7,5
	Belgium	6	3,0	3,0	10,5
	Brazil	20	10,0	10,0	20,5
	Brunei	1	,5	,5	21,0
	Canada	3	1,5	1,5	22,5
	China	16	8,0	8,0	30,5
	Czech Republic	2	1,0	1,0	31,5
	Equator	2	1,0	1,0	32,5
	Finland	1	,5	,5	33,0
	France	6	3,0	3,0	36,0
	Germany	23	11,5	11,5	47,5
	Hong Kong	4	2,0	2,0	49,5
	Italy	15	7,5	7,5	57,0
	Luxembourg	1	,5	,5	57,5
	Mexico	3	1,5	1,5	59,0
	Netherlands	8	4,0	4,0	63,0
	Panama	2	1,0	1,0	64,0
	Poland	2	1,0	1,0	65,0
	Serbia	2	1,0	1,0	66,0
	Singapore	4	2,0	2,0	68,0
	Slovenia	1	,5	,5	68,5
	South Korea	10	5,0	5,0	73,5
	Spain	15	7,5	7,5	81,0
	Sweden	3	1,5	1,5	82,5
	Switzerland	3	1,5	1,5	84,0
	Taiwan	2	1,0	1,0	85,0
	Turkey	1	,5	,5	85,5
	UK	19	9,5	9,5	95,0
	USA	10	5,0	5,0	100,0
	Total	200	100,0	100,0	

Appendix 6: Trip characteristics, SPSS outputs

Duration of the stay					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<1day	4	2,0	2,0	2,0
	1-3 days	89	44,5	44,5	46,5
	4-14 days	83	41,5	41,5	88,0
	>14days	24	12,0	12,0	100,0
	Total	200	100,0	100,0	

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Frequency of travel (year)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<15days/year	32	16,0	16,2	16,2
	15-30days?/year	92	46,0	46,5	62,6
	31-60days/year	50	25,0	25,3	87,9
	>60days/year	24	12,0	12,1	100,0
	Total	198	99,0	100,0	
Missing	System	2	1,0		
Total		200	100,0		

Purpose of visit

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Leisure	159	79,5	80,3	80,3
	Business	9	4,5	4,5	84,8
	Visting Family & Relatives	30	15,0	15,2	100,0
	Total	198	99,0	100,0	
Missing	System	2	1,0		
Total		200	100,0		

Type of visit

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First time in Lisbon	166	83,0	83,8	83,8
	Repeater	32	16,0	16,2	100,0
	Total	198	99,0	100,0	
Missing	System	2	1,0		
Total		200	100,0		

Accompany of travel

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Alone	24	12,0	12,1	12,1
	With Family	59	29,5	29,6	41,7
	With friends	104	52,0	52,3	94,0
	With others	12	6,0	6,0	100,0
	Total	199	99,5	100,0	
Missing	System	1	,5		
Total		200	100,0		

Booking method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	by myself	156	78,0	78,0	78,0
	tour operators/travelagency	11	5,5	5,5	83,5
	friends/relatives	30	15,0	15,0	98,5
	company	3	1,5	1,5	100,0
	Total	200	100,0	100,0	

Appendix 7: Descriptive Statistics, SPSS tables

Table 32 - Importance and usefulness of travel information sources

Importance given to information sources in general travel planning	Mean	Usefulness of information sources in the trip to Lisbon	Mean
Travel websites	4,07	Travel review sites	3,68
Own experience	4,04	Travel websites	3,61
Travel review sites	4,02	Friends and relatives	3,58
Friends and relatives	3,95	Own experience	2,88
Social media sites	2,90	Social media sites	2,67
Printed media	2,60	Printed media	2,25
Official tourism organizations	2,40	Official Portuguese tourism organizations	2,14
Tour operators/travel agencies	1,95	Tour operators/travel agencies	1,81

Table 33 - Social media purposes in travel planning

Social media purposes in travel planning	Mean
<i>Pre travel</i>	
To collect particular information only available online (tips, events, photos, etc.)	3,75
To enquire about the destination, accommodation, restaurants, etc.	3,89
To search for specific campaigns and offers	2,85
To search for reviews of hotels, restaurants, attractions	4,01
To compare travel alternatives and narrow down my choices	3,50
<i>During travel</i>	
To update my own social media platform	3,06
To stay connected with friends	3,46
To search for particular information at the destination	3,78
<i>After travel</i>	
To share my experiences, photos and videos with others	3,76
To write travel reviews and recommendations	2,70
To get inspiration for my next travel	3,18

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Table 34 - Social media sites used

Social media sites	Mean
Tripadvisor	3,71
Independent travel blogs	3,23
Facebook	2,62
Google Plus	2,52
Youtube	2,06
Instagram	1,86
Pinterest	1,44
Twitter	1,32

Table 35 - Evaluation of social media content

Evaluation of social media content	Mean
Interest	3,91
Utility	3,89
Trustworthiness	3,79
Actualization	3,75
Reliability	3,67
Personalization	3,48
Creativeness	3,43

Table 36 - Level of change in original travel plans

Changes in original travel plans	N (200)	%
I am not sure if I made any changes	23	11.8%
I did not make any changes	45	23.1%
I did make a few changes	95	48.7%
I did make several changes	32	16.4%

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Table 37 - Lisbon Destination Image

Lisbon Destination Image	Mean
High number of interesting attractions and activities	4,09
High number of high quality restaurants	3,68
Wide range of accommodation options for everyone	4,05
Safe travel destination	3,99
Affordable	4,19
Hospitable	4,24
Good overall travel experience	4,36
Recommend to my friends and relatives	4,49

Table 38 - Ranking of the visit to Lisbon

Ranking of the visit to Lisbon	Ranking of the visit to Lisbon	N (200)	%
Below my expectations		12	7%
According to my expectations		82	48%
Above my expectations		77	45%

Table 39 - Official tourism online sources usage

Official tourism online sources	N (200)	%
Never	63	31.8%
Rarely	46	23.2%
Sometimes	42	21.2%
Often	32	16.2%
Always	15	7.6%

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Table 40 - Portuguese DMOs official social sites usage

Portuguese DMOs official social sites usage	Yes		No	
	N	%	N	%
Visit Portugal official website	60	30,3%	138	69,7%
Visit Portugal Facebook page	34	17,1%	165	82,9%
Visit Portugal Twitter page	4	2%	195	98%
Visit Portugal Youtube channel	9	4,5%	189	95,5%
Visit Portugal Pinterest page	2	1%	197	99%
Visit Lisboa official website	48	24,1%	151	75,9%
Visit Lisboa Facebook page	31	15,6%	168	84,4%
Visit Lisboa Twitter page	3	1,5%	196	98,5%
Visit Lisboa Youtube channel	4	2%	195	98%
Visit Lisboa Pinterest page	2	1%	197	99%

Table 41 - Portuguese DMOs social media sites features

Portuguese DMOs social media sites features site	Mean
Information provided (text, image, video)	3,79
Trustworthiness of social networking information	3,61
Organization and visual design	3,52
Useful format	3,63
Easiness of use	3,78
Updated contents	3,76
Navigation support (language translator, content listings, direct links)	3,58
Ability to communicate with other users	3,30
Privacy settings	3,27

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Table 42 - Portuguese DMOs social media sites content

Portuguese DMOs social media sites content	Mean
General information	3,95
Special campaigns and promotional offers	3,29
Travel reviews and personal experiences	3,54
Photos and videos of the destination	3,75
Insight information (tips, local places, special events, etc.)	3,72
Posts of interest and comments	3,52
Good feedback and customer replies	3,50
Recommend to my friends and family	3,82

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Appendix 8: ANOVA and t-tests, SPSS outputs

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
GIS Social Media & Travel review sites	Male	87	3,41	1,054	,113
	Female	113	3,50	,920	,087

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
GIS Social Media & Travel review sites	2,206	,139	,648	198	,518	-,091	,140	-,366	,185	
										Equal variances assumed
Equal variances not assumed			,637	171,176	,525	-,091	,142	-,372	,190	

Descriptives

GIS Social Media & Travel review sites

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
18-25	112	3,47	,896	,085	3,30	3,64	2	5
26-35	59	3,58	1,074	,140	3,30	3,86	1	5
36-45	19	3,39	1,137	,261	2,85	3,94	1	5
>46	10	2,90	,907	,287	2,25	3,55	1	4
Total	200	3,47	,979	,069	3,33	3,60	1	5

ANOVA

GIS Social Media & Travel review sites

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4,018	3	1,339	1,406	,242
Within Groups	186,737	196	,953		
Total	190,755	199			

Descriptives

GIS Social Media & Travel review sites

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
High School	11	3,77	1,057	,319	3,06	4,48	2	5
Professional Degree	82	3,68	,921	,102	3,47	3,88	2	5
Higher Degree	107	3,27	,982	,095	3,08	3,46	1	5
Total	200	3,47	,979	,069	3,33	3,60	1	5

ANOVA

GIS Social Media & Travel review sites

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8,747	2	4,374	4,734	,010
Within Groups	182,008	197	,924		
Total	190,755	199			

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Multiple Comparisons

Dependent Variable: GIS Social Media & Travel review sites
Scheffe

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
High School	Professional Degree	,096	,309	,953	-,67	,86
	Higher Degree	,502	,304	,259	-,25	1,25
Professional Degree	High School	-,096	,309	,953	-,86	,67
	Higher Degree	,406	,141	,017	,06	,75
Higher Degree	High School	-,502	,304	,259	-1,25	,25
	Professional Degree	-,406	,141	,017	-,75	-,06

*. The mean difference is significant at the 0.05 level.

GIS Social Media & Travel review sites

Scheffe^{a,b}

Education	N	Subset for alpha =
		0.05
		1
Higher Degree	107	3,27
Professional Degree	82	3,68
High School	11	3,77
Sig.		,165

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 26,679.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Descriptives

GIS Social Media & Travel review sites

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
<20,000€	92	3,42	,947	,099	3,22	3,61	1	5
20,000€-39,999€	30	3,65	1,076	,196	3,25	4,05	1	5
40,000€-59,999€	34	3,44	1,043	,179	3,08	3,81	1	5
>60,000€	25	3,38	1,139	,228	2,91	3,85	1	5
Total	181	3,46	1,010	,075	3,31	3,60	1	5

ANOVA

GIS Social Media & Travel review sites

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,410	3	,470	,457	,713
Within Groups	182,236	177	1,030		
Total	183,646	180			

Descriptives

GIS Social Media & Travel review sites

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
<1day	4	3,75	1,041	,520	2,09	5,41	3	5
1-3 days	89	3,54	,946	,100	3,35	3,74	1	5
4-14 days	83	3,33	1,046	,115	3,10	3,55	1	5
>14days	24	3,60	,834	,170	3,25	3,96	2	5
Total	200	3,47	,979	,069	3,33	3,60	1	5

ANOVA

GIS Social Media & Travel review sites

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,978	3	,993	1,036	,378
Within Groups	187,777	196	,958		
Total	190,755	199			

The use of social media in travel planning: solutions for DMOs

Descriptives

GIS Social Media & Travel review sites

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Leisure	159	3,40	,996	,079	3,25	3,56	1	5
Business	9	3,78	1,253	,418	2,81	4,74	2	5
Visiting Family & Relatives	30	3,72	,784	,143	3,42	4,01	3	5
Total	198	3,47	,983	,070	3,33	3,61	1	5

ANOVA

GIS Social Media & Travel review sites

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3,400	2	1,700	1,772	,173
Within Groups	187,136	195	,960		
Total	190,537	197			

Group Statistics

	Type of visit	N	Mean	Std. Deviation	Std. Error Mean
GIS Social Media & Travel review sites	First time in Lisbon	166	3,48	,954	,074
	Repeater	32	3,39	1,134	,200

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
GIS Social Media & Travel review sites	Equal variances assumed	2,247	,135	,464	196	,643	,088	,190	-,287	,463
	Equal variances not assumed			,413	39,896	,682	,088	,214	-,344	,520

Descriptives

GIS Social Media & Travel review sites

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Alone	24	3,56	,838	,171	3,21	3,92	2	5
With Family	59	3,31	1,026	,134	3,04	3,57	1	5
With friends	104	3,50	,936	,092	3,32	3,69	2	5
With others	12	3,67	1,371	,396	2,80	4,54	1	5
Total	199	3,46	,981	,070	3,33	3,60	1	5

ANOVA

GIS Social Media & Travel review sites

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,388	3	,796	,825	,481
Within Groups	188,079	195	,965		
Total	190,467	198			

Appendix 9: Exploratory Factor Analysis, SPSS outputs

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,838
Bartlett's Test of Sphericity	Approx. Chi-Square	982,627
	df	55
	Sig.	,000

KMO	Recommended values
]0.9; 1.0]	Superb
]0.8; 0.9]	Great
]0.7; 0.8]	Good
]0.6; 0.7]	Mediocre
]0.5; 0.6[Acceptable
≤ 0.5	Inacceptable

KMO values for EFA

The use of social media in travel planning: solutions for DMOs

Anti-image Matrices

		To collect particular information only available online	To enquire about the destination, accomodation, restaurants	To search for specific campaigns and offers	To search for reviews	To compare travel alternatives and narrow down my choices	To update my own social media platform	To stay connected to my friends	To search for particular information at the destination	To share my experiences, photos and videos with others	To write travel reviews and recommendations	To get inspiration for my next travel
Anti-image Covariance	To collect particular information only available online	,474	-,144	,033	-,031	-,062	-,033	,003	,031	-,059	,101	-,088
	To enquire about the destination, accomodation, restaurants	-,144	,272	-,091	-,143	-,042	,001	,066	-,084	,029	-,057	,039
	To search for specific campaigns and offers	,033	-,091	,636	-,037	-,105	-,091	,005	,024	-,003	,019	-,039
	To search for reviews	-,031	-,143	-,037	,341	-,081	,009	-,006	-,073	-,013	,025	-,004
	To compare travel alternatives and narrow down my choices	-,062	-,042	-,105	-,081	,480	-,002	,009	-,047	-,007	,001	-,096
	To update my own social media platform	-,033	,001	-,091	,009	-,002	,487	-,222	,026	-,181	,007	,017
	To stay connected to my friends	,003	,066	,005	-,006	,009	-,222	,526	-,148	-,079	,034	-,049
	To search for particular information at the destination	,031	-,084	,024	-,073	-,047	,026	-,148	,526	-,041	,010	-,090
	To share my experiences, photos and videos with others	-,059	,029	-,003	-,013	-,007	-,181	-,079	-,041	,475	-,190	-,033
	To write travel reviews and recommendations	,101	-,057	,019	,025	,001	,007	,034	,010	-,190	,630	-,229
To get inspiration for my next travel	-,088	,039	-,039	-,004	-,096	,017	-,049	-,090	-,033	-,229	,565	
Anti-image Correlation	To collect particular information only available online	,861 ^a	-,401	,061	-,078	-,130	-,069	,005	,061	-,124	,185	-,171

The use of social media in travel planning: solutions for DMOs

To enquire about the destination, accomodation, restaurants	-,401	,796 ^a	-,219	-,470	-,117	,002	,174	-,223	,082	-,138	,100
To search for specific campaigns and offers	,061	-,219	,911 ^a	-,079	-,191	-,164	,009	,041	-,006	,031	-,065
To search for reviews	-,078	-,470	-,079	,873 ^a	-,201	,023	-,014	-,171	-,031	,054	-,008
To compare travel alternatives and narrow down my choices	-,130	-,117	-,191	-,201	,928 ^a	-,004	,018	-,094	-,014	,001	-,184
To update my own social media platform	-,069	,002	-,164	,023	-,004	,766 ^a	-,437	,051	-,375	,013	,032
To stay connected to my friends	,005	,174	,009	-,014	,018	-,437	,740 ^a	-,281	-,158	,060	-,090
To search for particular information at the destination	,061	-,223	,041	-,171	-,094	,051	-,281	,891 ^a	-,081	,017	-,166
To share my experiences, photos and videos with others	-,124	,082	-,006	-,031	-,014	-,375	-,158	-,081	,819 ^a	-,347	-,064
To write travel reviews and recommendations	,185	-,138	,031	,054	,001	,013	,060	,017	-,347	,705 ^a	-,385
To get inspiration for my next travel	-,171	,100	-,065	-,008	-,184	,032	-,090	-,166	-,064	-,385	,842 ^a

a. Measures of Sampling Adequacy(MSA)

The use of social media in travel planning: solutions for DMOs

Correlation Matrix

	To collect particular information only available online	To enquire about the destination, accomodation, restaurants	To search for specific campaigns and offers	To search for reviews	To compare travel alternatives and narrow down my choices	To update my own social media platform	To stay connected to my friends	To search for particular information at the destination	To share my experiences, photos and videos with others	To write travel reviews and recommendations	To get inspiration for my next travel
Sig. (1-tailed)											
To collect particular information only available online		,000	,000	,000	,000	,001	,051	,000	,000	,070	,000
To enquire about the destination, accomodation, restaurants	,000		,000	,000	,000	,028	,445	,000	,006	,007	,000
To search for specific campaigns and offers	,000	,000		,000	,000	,000	,024	,000	,000	,014	,000
To search for reviews	,000	,000	,000		,000	,007	,079	,000	,001	,016	,000
To compare travel alternatives and narrow down my choices	,000	,000	,000	,000		,001	,025	,000	,000	,001	,000
To update my own social media platform	,001	,028	,000	,007	,001		,000	,000	,000	,000	,000
To stay connected to my friends	,051	,445	,024	,079	,025	,000		,000	,000	,002	,000
To search for particular information at the destination	,000	,000	,000	,000	,000	,000	,000		,000	,000	,000
To share my experiences, photos and videos with others	,000	,006	,000	,001	,000	,000	,000	,000		,000	,000
To write travel reviews and recommendations	,070	,007	,014	,016	,001	,000	,002	,000	,000		,000
To get inspiration for my next travel	,000	,000	,000	,000	,000	,000	,000	,000	,000	,000	

Social media in travel planning: solutions for DMOs

Communalities

	Initial	Extraction
To collect particular information only available online	1,000	,612
To enquire about the destination, accomodation, restaurants	1,000	,820
To search for specific campaigns and offers	1,000	,466
To search for reviews	1,000	,765
To compare travel alternatives and narrow down my choices	1,000	,653
To update my own social media platform	1,000	,775
To stay connected to my friends	1,000	,765
To search for particular information at the destination	1,000	,532
To share my experiences, photos and videos with others	1,000	,701
To write travel reviews and recommendations	1,000	,827
To get inspiration for my next travel	1,000	,680

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4,595	41,776	41,776	4,595	41,776	41,776	3,725	33,862	33,862
2	1,998	18,160	59,935	1,998	18,160	59,935	2,173	19,752	53,614
3	1,003	9,118	69,054	1,003	9,118	69,054	1,698	15,440	69,054
4	,694	6,313	75,367						
5	,602	5,472	80,839						
6	,525	4,776	85,615						
7	,409	3,715	89,330						
8	,362	3,291	92,620						
9	,320	2,908	95,528						
10	,306	2,778	98,306						
11	,186	1,694	100,000						

Extraction Method: Principal Component Analysis.

Component Matrix^a

	Component		
	1	2	3
To collect particular information only available online	,704	-,323	-,111
To enquire about the destination, accomodation, restaurants	,758	-,496	-,014
To search for specific campaigns and offers	,636	-,204	-,140
To search for reviews	,765	-,419	-,067
To compare travel alternatives and narrow down my choices	,756	-,284	,038
To update my own social media platform	,523	,594	-,386
To stay connected to my friends	,429	,658	-,385
To search for particular information at the destination	,727	-,010	-,056
To share my experiences, photos and videos with others	,596	,587	,021
To write travel reviews and recommendations	,446	,408	,679
To get inspiration for my next travel	,651	,232	,450

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

Rotated Component Matrix^a

	Component		
	1	2	3
To collect particular information only available online	,772	,110	,064
To enquire about the destination, accomodation, restaurants	,898	-,048	,104
To search for specific campaigns and offers	,655	,185	,058
To search for reviews	,869	,041	,090
To compare travel alternatives and narrow down my choices	,772	,082	,224
To update my own social media platform	,154	,861	,102
To stay connected to my friends	,040	,869	,090
To search for particular information at the destination	,610	,323	,236
To share my experiences, photos and videos with others	,160	,674	,470
To write travel reviews and recommendations	,044	,133	,898
To get inspiration for my next travel	,342	,207	,721

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

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Component Transformation Matrix

Component	1	2	3
1	,820	,415	,394
2	-,555	,745	,371
3	-,140	-,523	,841

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Reliability Statistics

Cronbach's Alpha	N of Items
,874	6

Reliability Statistics

Cronbach's Alpha	N of Items
,799	3

Reliability Statistics

Cronbach's Alpha	N of Items
,653	2

Appendix 10: ANOVA with repeated measures, SPSS outputs

Within-Subjects Factors

Measure: MEASURE_1

usage	Dependent Variable
1	Pre_trip
2	During_trip
3	After_trip

Descriptive Statistics

	Mean	Std. Deviation	N
Pre_trip	3,6315	,98019	198
During_trip	3,4327	1,14524	198
After_trip	2,9369	1,13429	198

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
usage	Pillai's Trace	,270	36,331 ^b	2,000	196,000	,000	,270
	Wilks' Lambda	,730	36,331 ^b	2,000	196,000	,000	,270
	Hotelling's Trace	,371	36,331 ^b	2,000	196,000	,000	,270
	Roy's Largest Root	,371	36,331 ^b	2,000	196,000	,000	,270

a. Design: Intercept

Within Subjects Design: factor1

b. Exact statistic

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Effect	Subjects	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b		
						Greenhouse-Geisser	Huynh-Feldt	Lower-bound
usage		,995	,937	2	,626	,995	1,000	,500

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept

Within Subjects Design: factor1

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
usage	Sphericity Assumed	50,677	2	25,338	34,139	,000	,148
	Greenhouse-Geisser	50,677	1,991	25,459	34,139	,000	,148
	Huynh-Feldt	50,677	2,000	25,338	34,139	,000	,148
	Lower-bound	50,677	1,000	50,677	34,139	,000	,148
Error(usage)	Sphericity Assumed	292,432	394	,742			
	Greenhouse-Geisser	292,432	392,129	,746			
	Huynh-Feldt	292,432	394,000	,742			
	Lower-bound	292,432	197,000	1,484			

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	usage	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
usage	Linear	47,766	1	47,766	69,094	,000	,260
	Quadratic	2,910	1	2,910	3,669	,057	,018
Error(usage)	Linear	136,190	197	,691			
	Quadratic	156,242	197	,793			

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Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	6601,333	1	6601,333	3182,088	,000	,942
Error	408,682	197	2,075			

Estimates

Measure: MEASURE_1

factor1	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	3,631	,070	3,494	3,769
2	3,433	,081	3,272	3,593
3	2,937	,081	2,778	3,096

Pairwise Comparisons

Measure: MEASURE_1

(I) usage	(J) usage	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
1	2	,199	,088	,077	-,015	,412
	3	,695	,084	,000	,493	,896
2	1	-,199	,088	,077	-,412	,015
	3	,496	,088	,000	,284	,708
3	1	-,695	,084	,000	-,896	-,493
	2	-,496	,088	,000	-,708	-,284

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Bonferroni.

Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	,270	36,331 ^a	2,000	196,000	,000	,270
Wilks' lambda	,730	36,331 ^a	2,000	196,000	,000	,270
Hotelling's trace	,371	36,331 ^a	2,000	196,000	,000	,270
Roy's largest root	,371	36,331 ^a	2,000	196,000	,000	,270

Each F tests the multivariate effect of factor1. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Exact statistic

Appendix 11: Correlations between trustworthiness of social media sites and usefulness of social media & travel review sites, SPSS outputs

			LIS Social Media & Travel review sites	Trustworthiness
Spearman's rho	LIS Social Media & Travel review sites	Correlation Coefficient	1,000	,252**
		Sig. (2-tailed)	.	,000
		N	200	188
	Trustworthiness	Correlation Coefficient	,252**	1,000
		Sig. (2-tailed)	,000	.
		N	188	188

** . Correlation is significant at the 0.01 level (2-tailed).

Appendix 12: Correlations between trustworthiness of social media sites and change in original travel plans, SPSS outputs

			Trustworthiness	Changes in original travel plans
Spearman's rho	Trustworthiness	Correlation Coefficient	1,000	,156*
		Sig. (2-tailed)	.	,034
		N	188	185
	Changes in original travel plans	Correlation Coefficient	,156*	1,000
		Sig. (2-tailed)	,034	.
		N	185	195

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix 13: Correlations between trustworthiness of social media sites and tourists destination image, SPSS outputs

			Trustworthiness	Lisbon Destination Image
Spearman's rho	Trustworthiness	Correlation Coefficient	1,000	,237**
		Sig. (2-tailed)	.	,001
		N	188	188
	Lisbon Destination image	Correlation Coefficient	,237**	1,000
		Sig. (2-tailed)	,001	.
		N	188	200

** . Correlation is significant at the 0.01 level (2-tailed).