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The Role of Online Networks in Tourism Entrepreneurial Opportunity Recognition: A Study of Cameroon

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Abstract

The entrepreneurial process begins from opportunity recognition. It is the base for new venture creation. While in the tourism sector this area of research has been quite dormant, the mainstream entrepreneurship literature reveals that social networks are key sources of opportunity recognition. However, one of the most recent development in societies is the changes impacted by information and communication technologies. We see evidence that information and communication technologies have significantly streamline individuals' way of life and business practices. Building on the rational that information and communication technologies are empowering people to become entrepreneurs, opening up new ways of networking, connectivity and giving that social networks are key sources of opportunity recognition; there is a need to uncover the role of online networks in tourism entrepreneurial opportunity recognition. Using Cameroon as a case for its reach cultural diversity and the increasing awareness as well as usage of online networks, this study proposed mixed methods. Triangulation of qualitative case study and a survey will be applied. The qualitative case study will be utilised to interview tourism entrepreneurs in Cameroon. The results of the qualitative method will save as basis for formulating questionnaire for the quantitative method.

Keywords: Social Networks, Online networks, Tourism Entrepreneurship, Opportunity Recognition, Cameroon

1 BACKGROUND AND CONTEXT

Recent developments in tourism academia have heightened the need for more studies on tourism entrepreneurship (Cheng, Li, Petrick and O'Leary, 2011; Koh, and Hatten, 2002). This evidence is based on several calls for more research for scholars, policy makers and practitioners (Solvoll, et al., 2015). Most importantly, the state of the art in tourism entrepreneurship research reveals that scholars have explored tourism entrepreneurship from two perspectives.

The convergent perspective in which researchers adopt mainstream entrepreneurship theories to examine the context of tourism, and the divergent perspective in which scholars examine tourism entrepreneurship differently from other types of entrepreneurship and thereby requiring specific theoretical insights (Solvoll, et al., 2015). Nevertheless, these previous studies on tourism entrepreneurship have predominantly focused on lifestyle entrepreneurship, entrepreneurship education, entrepreneurship motives and characteristics, entrepreneurship orientation, sustainability and innovation (See Peters, Frehse and Buhalis, 2009; Ahmad and Ahmad 2016; Sivas, 2001; Beem Beeka and Rimmington, 2011; Peters & Kallmuenzer, 2015; Solvoll et al. 2015, Hall and Williams, 2008; Hjalager, 2014; Hjalager, 2015).

So far, however, there has been little discussion about tourism entrepreneurial opportunities recognition in tourism academic literature, and therefore needs scientific development. Indeed, research in this area is called for because entrepreneurial opportunities form the basis of new ventures creation (Shane and Venkataraman, 2000). In addition, findings could provide important policy implications to support tourism entrepreneurship development.

While opportunity recognition is dormant in tourism entrepreneurship research, evidence points that it is highly explored in mainstream entrepreneurship. Indeed, scholars have examined a number of reasons that appears to effect entrepreneurial opportunity recognition

in individuals (Ardichvile, Cardozo and Ray, 2003, Wang et al., 2013). Although several factors lead to entrepreneurial opportunity recognition, one greatly researched reason is the need of social networks for the relevant information (Ozgen and Baron, 2007; Eren, 2003; Sharma and Salwan, 2016). It has been hypothesized that entrepreneurs who have extended networks spot significantly more opportunities than entrepreneurs who lack such networks. Moreover, the quality of network contacts can impact other components including alertness, which lead to increase in opportunity identification (Hills, 1995).

However, in most recent years, exclusive attention is directed towards the use of online network. Undoubtedly, there is a growing recognition of information and communication technology "ICT" use by small and medium sized enterprises (Buhalis and Law, 2008). From this perspective, the adoption of ICT where entrepreneurs are making use of its development is seen as a key factor which has an impact on the extent of entrepreneurship (Nambisan and Nambisan, 2008). The aim of this study is to investigate the role of online networks in opportunity recognition among tourism entrepreneurs in the Republic of Cameroon. It can be argued that the adopted perspective is of relevance for studying opportunity recognition and entrepreneurship in emerging market due to the rapid increase of awareness and usage of internet. Another reason for this context is that there are less empirical studies with regard to the topic of entrepreneurial opportunity recognition; especially in transforming nations such as Cameroon which is characterized by a dynamic and uncertain business atmosphere. Of course, entrepreneurship activities in Cameroon are multi-cultural specific; thus taking into account a broad range of socio cultural factors and practices (Skokic, 2016); and social capital that are shaping the forms of collective action (Sigala, 2016; Nagoasong and Kimbu ,2016) is of great significance. The paper draws on two key ideas from the literature on the social transition influenced by ICT and entrepreneurial opportunity recognition.

2 THEORETICAL BACKGROUND

Baron and Ensley (2006) and Baron (2006) define entrepreneurial opportunity recognition as a process through which ideas for new business ventures are identified. While Christensen, Madesen and Peterson (1989) believe that opportunity recognition is either: a) perceiving a possibility to create new business; or b) significantly improving the position of an existing business in both cases resulting in new profit potential. In contrast, Shane and Venkataraman (2000) consider entrepreneurial opportunity recognition as a process whereby entrepreneurs identify, recognize, and discover potential opportunities to create and develop new business, ventures, markets and technology. To Smith-Nelson et al. (2011), entrepreneurial opportunity recognition is an individual's ability to recognize business opportunities from changing environmental events that may produce new and or useful products or services or a means for which an existing business may generate a profit measured in consideration of quantity; quality and originality or opportunities identified in response to a given stimuli or set of circumstance.

But entrepreneurial opportunity recognition in essence, is a discovery of an idea to create a new business and the search of information regarding market and technological possibilities (Eren, 2003). Indeed, there is no standard definition of entrepreneurial opportunity recognition in academic literature (Ardichvili and Cardozo, 2000). This seems to be because of two reasons first, the perceived conceptual ambiguity and methodological challenges of the phenomenon; secondly, entrepreneurial opportunity can mean different things to different people (Wei Lee et al., 2016). However, this study adopts Shane and Venkataraman (2000), approach of opportunity recognition.

The discovery of entrepreneurial opportunity can be explained by the nature of the assumption of the entrepreneurial process (Shane, 2000). Actually, entrepreneurship literature within the economic theory falls into two schools of thoughts: neoclassical equilibrium theory and the Austrian theory. The neoclassical equilibrium theory presupposes that entrepreneurial opportunities are general knowledge, and that everyone can recognize all entrepreneurial opportunities. But it is an individual risk propensity of people rather than information about opportunities, that ascertains who becomes an entrepreneur (Shane, 2000).On the other hand, the Austrian theory argues that people cannot recognize all opportunities. It claims that it is the imperfect market with information asymmetry that generates the information gap, and that opportunities do not appear in a well packaged informational form (Venkataraman, 1997). Indeed, the distribution of information in society influences discovery of entrepreneurial opportunities; and of course, only a small subset of people is able to identify and recognize a specific opportunity in the market (Kirzner, 1997).Furthermore, the process of discovering opportunities depends on individual potentials and readiness to discover them (Stevenson and Gumpert, 1985).

3 PROPOSED METHOD

According to Wei Lee Lim et al., (2015) research on entrepreneurial opportunity recognition suffers from conceptual ambiguity and methodological challenges. Building on this notion the study adopts mixed methods. A mixed approach design is selected when relatively little is known about the research setting and research problems (Gray, 2009; Creswell and Clark, 2011). It captures the best of both qualitative and quantitative research approaches (Creswell, 2003).

Qualitative approach - In this study, qualitative case study is employed. A case study design should be taken into consideration when the focus of the study is to answer “how” and “why” questions; when the behavior of those involved in the study cannot be manipulated; when there is need to cover contextual conditions because it is believed that they are relevant to the phenomenon being studied; and the boundaries are not clear between the phenomenon and the context (Yin, 2003). Case study allows the researcher to generate new knowledge about the topic, and allows focus on contemporary real life events (Strauss and Corbin, 1990; Baxter and Jack, 2008). The study employs semi structured interviews with tourism entrepreneurs in Cameroon. The proposed number of participants is 30 tourism entrepreneurs and they will be purposefully selected. Sampling shall include only small and medium sized enterprises. The criteria for their selection shall be; (i); participant must be operating a tourism related enterprise. (ii); the entrepreneur is not a generational entrepreneur. That is, the entrepreneur did not buy or inherit the enterprise but actually is the founder of the enterprise.

A self-selection sampling technique (Altinay and Parasvkevasa, 2008) will be employed. The need for participation in the research will be mailed out to the informants together with invitation to participate in the study. The participant’s decision to take part to the interview will be voluntary. Data will be collected through in-depth face to face interviews in English language, French language or in pidgin-English depending on the language each participant wish in expressing him/her self, since the researcher understand all the three languages.

Quantitative approach – To gain more insights, a triangulation will be applied. Based on the content of the inductive approach, a survey instrument will be developed for the deductive approach. This means that a questionnaire will be formulated to collect quantitative data to further validate the outcome. A paper and pencil questionnaire will be administered to collect data from tourism entrepreneurs in Cameroon. Considering that some Cameroonian tourism

entrepreneurs are not literate enough to understand the meaning of opportunity recognition, the study adopts semi structured interview questionnaire technique. This implies that in a case a participant cannot complete the questionnaire by him or her-self; questions will be asked by the author and then the responses provided by the respondents will be ticked off accordingly.

4 EXPECTED OUTCOMES

Getting a deeper insight about the provenance of tourism entrepreneurial opportunity is significant to understand the tourism entrepreneurial process. Therefore, it is essential to shed light on the origin of tourism entrepreneurial opportunities and how they evolve. One other significant aspect is that waves of information and communication technology are fast changing social and economic settings, and minimizing the barriers of new business entrants, as well as empowering entrepreneurs. Thus, concluding this study, the author should best describe tourism entrepreneurship.

This process will generate new applicable insights about new tourism venture creation challenges while shedding light on the role of online networks in new business development from an emerging market. Furthermore, the author should uncover how entrepreneurial ideas are transformed into tourism ventures and come out with a strategic framework that can be used as guiding principles for small and medium sized enterprises development. In addition, it is also expected that the study should further contribute to the lacking literature in tourism entrepreneurial opportunity recognition.

Finally, the impact of the research is to inspire tourism entrepreneurs whom the data will be collected from, to discover their hidden talents, and construct new ways of creating ventures.

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Interaction Design and Cultural Heritage: how to design new visitors' trails using a proximity sensor system

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Abstract

Hypercongestion and Museum Fatigue became increasingly important issues in the last decades. This research aims to develop a new tool to map visitor behaviour and suggest new visitors' path based on the users' needs. Furthermore, this paper attempts to show some implications of Interaction Design applied to museum studies. To date, there are few case studies that have investigated the association between these areas of expertize, and the cases described in this paper are linked to some large scale Museums in Europe.
This study uses a qualitative case study approach to investigate how to develop a new research project that aims to create new visitor's path inside a museum. In order to design new visitor trails a Bluetooth sensors' system has been developed. The sensor system is still on a preliminary stage of implementation but it aims to enhance the museum experience by monitoring visitor's behaviour and suggest new path of visit.

Keywords: Visitor studies; Interaction Design; Museology; Bluetooth tracking; Human Centred Design, Cultural heritage.

1 PROBLEM STATEMENT AND THEORETICAL BACKGROUND

Stress and fatigue can seriously influence the fruition of the museums' display. In some large scale museums, it's possible to notice the phenomena of hypercongestion and museum fatigue (Bitgood, 2009), that can affect a large portion of visitors. Lately, Visitor Studies have received attention on this topics, and some large scale European museums are investigating new methods to improve the museum experience of each visitor.

The aim of the project is to meet the need of an enhanced museum experience, by reducing the risk of hypercongestion and museum fatigue.

An important study has been conducted in a research project that involved the Louvre museum and the MIT Senseable City lab (Yoshimura, et al., 2014). The Louvre hosts everyday thousands of visitors, and often it could be difficult to fruitful enjoy the artefacts along the display. To better understand the visitors' behaviour and activity inside the museum a sensors' system was settled up. This system helped to map the visitors' clustering and more in general the users' behaviour in some specific areas. Prior to understanding users' activity was essential to create visitors' movement patterns of mobility. An other noteworthy solution to improve the museum experience was found at the science museum in Trento, Northern Italy. In this museum proximity sensors have been placed along the display, in order to help and suggest to the visitors fixed visitor's trails and some insights about the collection.

In the case study we are presenting in this paper, we combined both the visitor's behaviour analysis to the path suggestion. To suggest new paths of visit was crucial to first understand visitors' navigation pattern along the display with a manual mapping (Bitgood, 2009). The manual mapping has been in support of the planning of sensors placement. At a preliminary stage was essential to investigate which areas of the museum were more crowded or on the opposite, more uncongested. After this non automated mapping was possible to plan the sensors' placement and set up the appropriate emitting frequency.

2 METHODOLOGY

Prior to commencing the study, ethical clearance was sought from the application of a Metadesign approach (Fisher, 2000). Following this approach was created a research team, with the aim to develop the concept of new visitor's. The team merges different areas of expertise, and includes engineers, designers, psychologists and museum curators. In order to coordinate a project with diverse institutions and professionals the Metadesign approach helped to establish a consequential number of steps (Fig.1). The steps are intended to help developing new exhibits paths implemented with the help of low impact tech devices. Testing and investigating the possibility to use technological solutions to the problem, was essential for first defining a representative scenario of the museum visitors needs, it has been necessary to underline what are the needs and the requirements its crucial to understand in order to coordinate the entire research project.

The case study reported on this paper portrays the operative and the evaluation phase of the project, which means we can be cautions to develop some data.

The application of the design approach was vital to create a set up of the research activities to delineate the needs of the individual actors who will come into contact with the product. This means not only the needs of the museum visitors, but also those who handle it (curators, scholars, museum management etc.) and others who are related to the museum visitor experience in different ways (Bitgood, 2009).

In an attempt to develop the proximity system, an ethological such as approach as the mapping was also engaged in order to analyze visitors behavioural pattern, furthermore we distributed a visitor's survey. These methods can show some limitations, but they have wide applicability in museum studies (Smith and Wittlin,1971) since they can support an accurate preliminary exploration. For the purpose of examine visitors' behavioural pattern inside the museum we choose to consider four specific guidelines:

The time taken from each visitor to see the entire collection

Detect the most crowded areas inside the building (visitors clustering along the display)

Operate the mapping on specific days (festive days, weekdays etc.)

To establish some visitor classification target (age, interests)

Taking into account the previous key lines was possible to map and to understand the visitor's behaviour in order to formulate some behavioural pattern (Bitgood, 2009). The first two guidelines based on time and space as variables have been helpful to develop the clustering thermal maps (Fig.2.), while the other two guidelines have been applied to design the customer's surveys.

3 RESULTS

The most interesting aspect of the data collected from the visitors' flux mapping inside the museum and the surveys is the average visit length: approximately four hours.

The average visit length is almost too tiring for all the visitors, especially elderly and children, and most of them wish a faster or more accessible way to enjoy the artefacts along the display.

It is apparent from the heat maps (Fig. 2) that very few people can pay attention to the artefact inside the rooms, most of the visitors tend to concentrate in the passageways areas in order to go to the next room see most of the collection. The general tendency of the average visitor is to see the entire museum without backtracking, as also as described by (Bitgood, 2006). In his study Bitgood stated that "Exhibitions that require backtracking to see all of the exhibit displays are undesirable because visitors do not want to waste time and energy" and this could be one of the cause that directly affects the museum experience and let the visitors avoid most of the showcases.

Taken together, these results suggest that there is an association between a more accessible path of visit and a less tiring and more enjoyable museum experience.

For these reasons this study supports the importance of an implemented museum experience. With the aim of evaluate this experience and to promote cultural dissemination it has been necessary to merge different areas of expertize.

This merging of expertize and purposes was vital for the implementation of a proximity sensor system that can include visitors inside a museum's collection, helping them to widely understand their cultural heritage.

In future stages it will be possible to set up more sensors and proceed with the applicative phase, in order to improve and develop the sensor system. Sensors could be placed next to every point of interest, in an attempt to collect real time data of visitors' flow. Furthermore, the visitors could be engaged in the project by using an Android App. This App will provide a graphic interface that will suggest new visit trails based recommended points of interest and path given by the system.

4 CONCLUSION

It can therefore be assumed that the aim of this project is to apply technologies and methods that can put together, into a constructive dialogue, engineering, museological, architectural aspects. These aspects would be all crucial to expand the museum's audience and make the museum's collection more accessible to visitors. Shortening the length of the average visit and proposing different keys to understand the artefacts can virtually enhance the museum experience and solve the hypercongestion and museum fatigue issues..

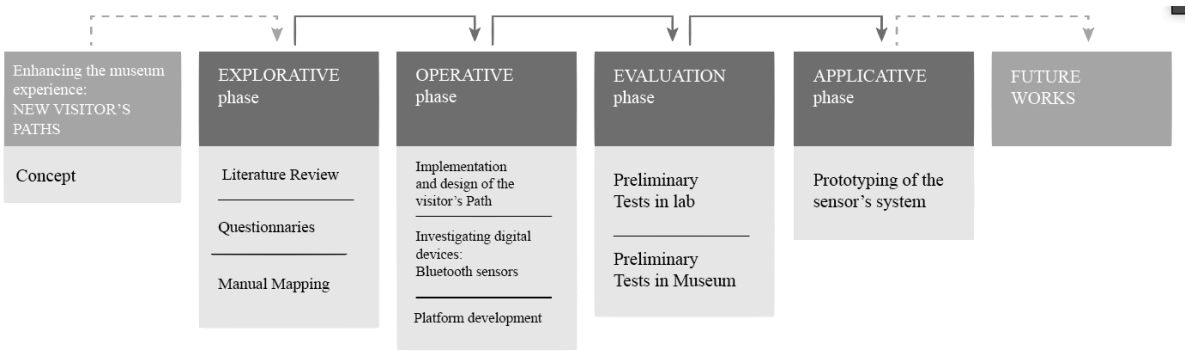

Figure 1. Our revised Metadesign approach consist of mainly six phases. In the first semester of 2017 the research project we are presenting can be located between the operative and the evaluation phase

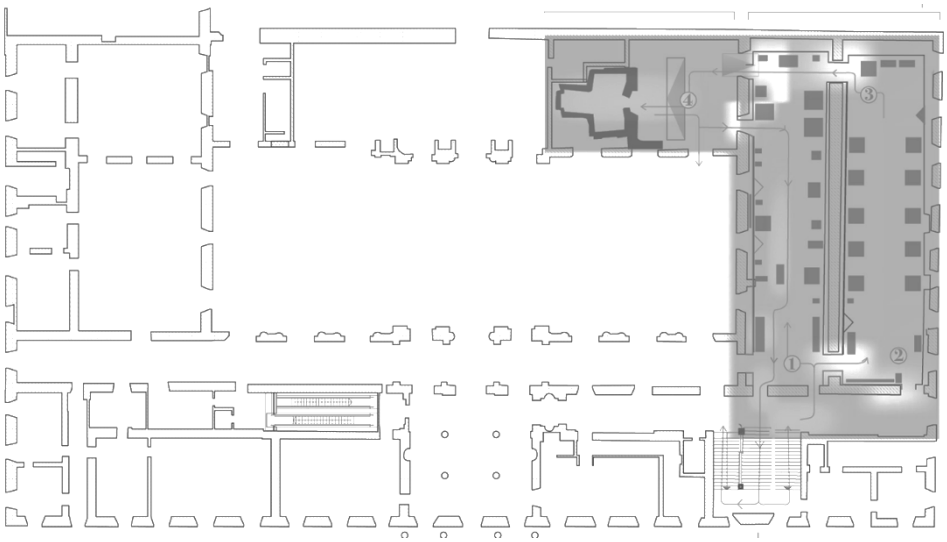

Figure 2. The heat map of the ground floor of our heat maps realised with data obtained from the visitors' manual mapping

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An Exploration of Digital Work-Life Balance in the Context of Leisure Travel

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Abstract

Purpose: The modern wave of technological advancement is having an impact of unprecedented scale on the way people work, manage family obligations and experience leisure. Supported by the increasing integration of technology in all realms of life, the historical boundaries between work and life have started dissolving. Technology not only empowered people with the possibility to perform work, family and leisure activities simultaneously but also created and environment where we can be reached anywhere and at anytime. As a consequence of the collapse of the divide between work and life a number of work-life balance issues have emerged. While digital technologies have allowed the temporal a physical mobilisation of working practices, they have also created conditions in which people can truly disengage and relax. This has major implications not only on the spheres of work and family but also on how people experience leisure. Leisure is a particularly important time to replenish resources and recover both physically and mentally from the demands of work. Despite the fact that leisure has been recognised to be an essential component of life, its importance has been overlooked in the work-life balance debate. Thus with the work and life domains blurring into each other it is essential to understand how people re-draw boundaries and manage the work and life demands in a leisure travel context. Towards this aim this research will analyse the use and effects of digital technology on work-life balance borders in the leisure travel context thought the lens of Border Theory.
Methodology: To address this gap, this research aims to shed light on the motives that drive people to bridge the divide between work and leisure and to develop an understanding of the role played by digital technology. In this context the practices adopted and the effects on work-life balance borders will also be assessed. To meet this aim, a mixed method approach will be applied. In the first stage of the data collection, focus group interviews will be conducted to qualitatively explore the emerging work-life paradigm from a leisure travel perspective. In the second stage, the results of the focus group interviews will be examined through a quantitative survey with the scope of assessing relationships between the identified individual reasons and practices and their effects on work-life borders.
Originality: This research will make a contribution to the management discipline and in particular to the organisational behaviour debate by revisiting and re-contextualising the Border Theory (Clark 2000). By adding the technology and leisure components to the Border Theory this study will propose a novel perspective to the work-life balance discourse and will contribute to the advancement of knowledge about how work and life come in contact and blending occurs.

Keywords: Work-life balance; Digital Technology; Leisure Travel.

1 PROBLEM STATEMENT AND THEORETICAL BACKGROUND

In 1930, the economist John Mynard Keynes in his essay entitled Economic Prospects for our Grandchildren (1930) forecasted a world in which, a century later, leisure would be the centre of people's daily life, and work would be limited to a three-hour shift and a fifteen-hour working week. Technical improvements and inventions were predicted to drive this change. However, the rapid technological advancement, which characterises modern society, left us with a paradox. While the time needed to carry out processes, communication and transportation has substantially shrunk, people still work forty hours a week and work appears to be more intense (Hoonakker and Korunka 2014).

With the advent of digital technologies the nature of many workplaces has begun a new process of evolution in which the spatial and temporal boundaries of work started collapsing (Pocock et al. 2012). Digital technology has indeed allowed the emergence of an anytime-anywhere connectedness to the workplace (Fenner and Renn 2010; Ludwig et al. 2016). As a consequence, regular work schedules and hours are becoming less common (Kossek 2016) and work settings and situations are increasingly being distributed across multiple contexts

both inside and outside the organisational environment (Bødker 2016). Thus, while the rapid growth of digital technologies has enabled the development of new and flexible work designs (Pocock et al. 2012; Demerouti et al. 2014; Bødker 2016), it is profoundly changing the relationship between work and non work-activities.

Digital technologies have created conditions in which people perform work, family and leisure activities almost simultaneously (D'Abate 2005; Ludwig et al. 2016). In fact, digital technologies have ceased to be an instrument to be used only within the work environment and evolved into tools that support demands generating both in the work and private contexts (Ludwig et al. 2016). As a result, it is increasingly difficult to distinguish the boundaries between work and private life (Lewis et al. 2007; Haeger and Lingham 2014). Thus, while crossing borders between work and life realms has become much easier (Chong et al. 2014; Ammons and Kelly 2015) employees can rarely afford to relax and take a break from work (Kossek 2016).

Recent studies suggests that the collapse of the boundaries between the work and private environment (Wapshott and Mallett 2012) not only promotes work extensions and increases working time (Chesley and Johnson 2015) but creates issues in maintaining work-life balance (Fenner and Renn 2010; Tarafdar et al. 2011). It may also lead to health and wellbeing complaints (Chong et al. 2014) with burn-out disorders, depression and somatic problems becoming a frequent consequence (Major et al. 2002; Smith and Puczkó 2009). This has major implications not only on the time people dedicate to work and leisure but also on their privacy, career, personal development and relationships (Boswell and Olson-Buchanan 2007; Schwab 2016).

The statement "'I need a holiday' reflects a modern discourse based on the idea that people's physical and mental health will be restored if only they can 'get away' from time to time" (Urry and Larsen 2011, p.6). Leisure is a key domain in people's lives (Snir and Harpaz 2002) and its central role is demonstrated by the continuous growth of the tourism industry (Newman et al. 2014). Research has shown that leisure contributes to detach from work, recover from stress and build up resources (Fritz and Sonnentag 2005; Newman et al. 2014).

A number of studies have recently been conducted providing insights into the use of digital technology in leisure travel settings. Digital technologies are described as a major instrument steering tourism forward (Buhalis and Law 2008; Neuhofer et al. 2012; Tanti and Buhalis 2016), which allowed the emergence and development of enhanced tourists' experiences (Neuhofer et al. 2014; Wang et al. 2016). However, digital technologies were identified to be not only a barrier impeding tourists to fully immerse in the destination and to escape from their everyday life but also to be interfering and an obstacle to personal development and serendipitous discovery (Neuhofer 2016; Tanti and Buhalis 2016). In this context, Kaplan and Kaplan (1989) argued that recovery from mental fatigue requires physical or conceptual settings, which differ from those present in the everyday life, a rich context that stimulates exploration, a fascinating content that promotes effortless attention and an environment compatible with one's interests.

Despite their importance, leisure experiences have however received little attention in the existing work-life balance literature (Knecht et al. 2016). Research has only recently begun investigating the consequences of digital technology use to perform work activities outside working hours. While this behaviour was identified to be a cause for personal discomfort and conflicts in the work-life interplay (Chesley and Johnson 2015), to date there is still no clear indication on the use and effects of technologies on employees in leisure travel settings. Upon this rationale, the present study aims to generate a broader understanding of the use of digital technologies in leisure travel and its implications for work-life balance.

2 METHODOLOGY

In the past decades, work-life balance has been object of empirical research among academics associated with the psychology and management disciplines, with work being published in over 120 journals (Chang et al. 2010). With respect to the research methodology, scholarly work in the area of work-life balance has been conducted by adopting a wide range of methods. While large scale-surveys emerged as a dominant methodology (Guest 2002; Pichler 2009), Guest (2002) advocates the adoption of supplementary alternative methods such as daily diaries, critical incidents, group interviews and participant and non-participant observations for work-life balance research.

In recent years, Boswell and Olson-Buchanan (2007) conducted a quantitative study on the impact of communication technologies after working hours in which non-academic employees of a public university were asked to complete a survey on their own attitudes and the attitudes of a significant other. Bell et al. (2012) adopted a voluntary self-report questionnaire to investigate the relationship between perceived job stress, work-life balance and wellbeing among academics of an Australian university. Chamakiotis et al. (2014) conducted a qualitative study including video diaries and interviews to examine the influence of information and communication technologies on the individuals' transitions between work and family roles. Chesley and Johnson (2015) framed their study around a quantitative survey to assess the impact of work extensions and obiquitous connectivity on employees' distress and productivity. Schlachter et al. (2015) employed a systematic review approach to investigate the consequences of staying 'switched on' during non-work time.

The diversity of methods adopted in previous studies highlights the complexity characterising the work and life domains with technology in place. Therefore, it is anticipated that a mixed methods strategy will be used in order to understand the changing nature of work-life balance and the use of digital technologies in leisure travel. Two phases are proposed:

1. A qualitative exploration of technology-assisted work-related activities in the leisure travel context. To this end, focus group interviews (up to 8 participants) will be conducted with the scope to identify reasons and practices adopted to perform work-related activities in leisure travel settings as well as their effects on work-life balance borders. Consequently, this will create a theoretical understanding of the work-life paradigm in the area of study within the Border Theory.

2. A quantitative investigation of the impact of technology-assisted work-related activities on work-life balance in leisure travel settings. Based on the findings from phase 1 a quantitative survey will be adopted to quantify the impact of digital technologies on work-life balance in the context of leisure travel and to identify relationships between reasons, practices and effects. A sample of approx. 500 respondents is anticipated.

The results will contribute to a comprehensive understanding of contemporary work-life balance and individuals' behaviour in an environment in which digital technologies allow anytime-anywhere connectedness to work.

3 EXPECTED RESULTS

The main contribution of the present study results from the exploration of the role of digital technology and leisure travel in the work–life interplay.

First, by adding a tourism lens to the work-life debate this research will open a novel area of inquiry that extends beyond the predominant focus on work and family issues (Knecht et al.

2016). In particular, it will contribute to the existing literature by revisiting, re-contextualising and advancing the Border Theory (Clark 2000).

Second, knowledge in the field of work-life balance and technological developments (eg. Derks et al. 2016; Grönvall et al. 2016; Ladkin et al. 2016) will be advanced by exploring the effects of contemporary digital technologies on "mediating, dissolving, enforcing, changing, negotiating and maintaining boundaries" (Bødker 2016, p.534) between work and life in a leisure travel setting.

By adding the leisure and technology components to the work-life balance debate, this study contributes to the advancement of knowledge about how work and widespread life domain come in contact and blending occurs. In fact, while Desrochers and Sargent (2004) suggested to apply the Border Theory to assess the impact of technology on the work-life interface, Brough and Kalliath (2009) argued that to fully understand work-life balance the exploration of the interplay between technological advancements and work behaviour cannot be limited to the workplaces boundaries.

4 CONCLUSION AND IMPLICATIONS

This work makes a two-fold theoretical contribution. First, it develops the Border Theory and depicts the overlooked relationship between work and leisure and its work-life balance implications. Second, it proposes an original holistic theoretical framework of the Digital Work-Life Balance phenomenon depicting the *reasons, practices and effects* of the use of digital technology to manage the work-leisure interface.

This study offers several practical and wider policy implications for the organisational behaviour field in that it sheds light upon one of the major management dilemmas of the 21st century (Harrington and Ladge 2009), namely work-life balance. This will ultimately lead to a better understanding of employees and allow proposing recommendations for the development of organisational policy. This is particularly important because a healthy work-life balance is most often considered a driver for individual and organisational performance (eg. McMillan et al. 2011; Khallash and Kruse 2012).

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The Influence of Online Consumer Reviews in Saudi Arabia on Consumers' Tourism Destination Visiting Intentions

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Abstract

This research examines the effects of cultural values, the Information Adoption Model (IAM), the Theory of Reasoned Action (TRA), and the construct of perceived trust in the information adoption of online consumer reviews and subsequent intentions to visit a domestic tourist destination in a Saudi Arabian context. The aim is to develop and test a new conceptual model for use in determining the factors that affect domestic tourists' intentions to visit a destination. The research utilises a quantitative research approach, using cross-sectional survey questionnaire methods. The research model will be analysed using AMOS 20, a structural modelling technique which will provide the means to assess and modify if necessary the proposed theoretical model. It is expected that the results will show a link between cultural values and subjective norms, which will affect information adoption and subsequent visiting intentions. It is also expected that the IAM constructs of source credibility and argument quality will have an effect. The results may provide a new approach for travel marketers to consider how OCR's affect domestic tourist destination choice.

Keywords: Domestic Tourism; Online Consumer Reviews; Visiting Intentions; Information Adoption; Cultural Values.

1 INTRODUCTION

Domestic tourism in the Kingdom of Saudi Arabia (KSA) accounts for a large percentage of the tourism sector and is under threat from outbound tourism, which currently offers more in the way of the leisure tourism division (SCHT, 2015). E-tourism platforms, which have been identified as a major contributing factor to the success of domestic tourism (Shanker, 2008), propagate information provision for potential tourists who want to research destinations before making a purchase decision. The primary form of online information provision in this context is electronic-word-of mouth (eWOM), which tourists are increasingly reliant on to inform decision-making (e.g. Sparks and Browning, 2011; Di Pietro, Di Virgilio and Pantano, 2012; Jalilvand and Samiei, 2012; Chen, Shang and Li, 2014; Ladhari and Michaud, 2015). Therefore, the importance of eWOM in acquiring and retaining tourists in an industry that is increasingly based on e-commerce is paramount (Vermeulen and Seegers, 2009).

One of the main methods of providing travel WOM information on the internet is through the use of online travel reviews. Such reviews are consumer generated and are found on blogs, forums, and websites such as TripAdvisor. Travellers are increasingly turning to such mediums to inform their own decisions, as opposed to travel intermediaries, believing the information posed by other consumers to be more credible than that posed by service providers (Ayeh, Au and Law, 2013). Thus, online consumer review (OCR) research has gained increasing attention in the current body of tourism literature, with findings revealing that OCR's affect the destination choice of potential visitors (Di Pietro, Di Virgilo and Pantano, 2012). Such research, however, has largely failed to account for the role of cultural values in the impact of OCR's and their effect on behavioural intentions, with King, Racherla and Bush (2014) commenting that OCR consumer information adoption and its effects on behavioural intentions in cross-cultural contexts is unknown in any kind of structural depth.

Therefore, it is imperative for the KSA to examine the role of OCR's and their effect on domestic tourist intentions in order to maintain and advance domestic tourism, accounting for cultural values and their effect on OCR information adoption. Thus, the present research investigates the impact of travel OCR's on tourists' intentions to choose a domestic tourism

destination. The research adopts the Information Adoption Model (IAM; Sussman and Siegal, 2003) and incorporates the Theory of Reasoned Action (TRA; Ajzen and Fishbein, 1980) components subjective norms and behavioural intentions. Hofstede's (1980) cultural dimensions are also considered, as well as the role of perceived trustworthiness.

2 THEORETICAL BACKGROUND

2.1 Theory of Reasoned Action

The TRA (Ajzen and Fishbein, 1980) was originally developed in order to comprehend the antecedents of volitional behaviour, proposing that behavioural intentions are the most prominent predictor of actual behaviour. Behavioural intentions are assumed to be a result of both individual influence and social normative influence; thus, the TRA postulates that behavioural intentions are mediated by the attitudes (behavioural beliefs) and subjective norms (normative beliefs) associated with the behaviour. Subjective norms refer to the perceived opinion of what referent others think the person in question should do in regards to the target behaviour. The reference individual or groups' influential relevance varies in accordance with the behavioural situation in question (Ajzen and Fishbein, 1973). Thus, they refer in total to the perceived opinion and the impetus to conform and comply with the proffered opinion (Vallerand et al., 1992). Attitudes in this context refers to an affective response towards performing the target behaviour (Ajzen and Fishbein, 1973).

Subjective norms have previously been found to strongly predict behavioural intentions to visit a tourism destination (Sparks and Pan, 2009). However, research has suggested that attitudes are not a significant predictor of behavioural intentions to visit a destination, suggesting that tourists may place more importance on social references than attitudes when visiting a destination (Hsu, Kang and Lam, 2006; Sparks and Pan, 2009). This has particularly been the case in cross-cultural research that has focused on collectivist cultures (Hsu et al., 2006). Since KSA has a strong collectivist culture, the present research will not consider the role of attitudes, focussing instead on the subjective norms component of the TRA.

2.2 Information Adoption Model

The IAM (Sussman and Siegal, 2003) was originally developed to explain the adoption of information within computer-mediated communication platforms. The model integrates the Technology Acceptance Model (Davis, 1989) and the Elaboration Likelihood Model (Petty and Cacioppo, 1984). The ELM is a dual-process model which posits that individuals can be affected by messages via a central or peripheral route (Petty and Cacioppo, 1984; Sussman and Siegal, 2003). The central route refers to direct, information-relevant message processing, whilst the peripheral route refers to extrinsic, indirect message processing (Petty and Cacioppo, 1984; Sussman and Siegal, 2003; Cheung, Luo, Sia and Chen, 2009; Shu and Scott, 2014). The IAM comprises of: argument quality, representing the central route; source credibility, representing the peripheral route; information usefulness, and; information adoption. Given that the model explains information on ICT communication mediums, it is pertinent in OCR research and appropriate in the context of the current study. The IAM, however, fails to account for behavioural intentions toward the adopted information; the current research will account for this relationship.

2.3 Perceived Derived Attributes Model

The PDA (Elwalda, Lu and Ali, 2016) integrates the Theory of Planned Behaviour (TPB; Ajzen, 1985) and the TAM (Davies, 1989) in order to explain how OCR's impact on consumer behaviour intentions. The PDA posits that perceived derived attributes of OCR's,

including perceived usefulness, perceived ease of use and perceived enjoyment, significantly affect trust in an e-vendor and intentions to shop online. Given that perceived usefulness has been found to precede perceived in other research (e.g. Awad and Ragowsky, 2008), the present research will draw on this and the PDA model to assume that perceived information usefulness precedes perceived trust in a travel OCR context.

2.4 Hofstede's Cultural Model

Hofstede (1980) based his model of cultural dimensions on research analysing the values of workers in relation to their organisational contexts. The findings underlined cultural variations among a number of differing nations, and suggested the importance of cultural values in individual behaviours. The model originally comprised of four dimensions; uncertainty avoidance, individualism vs. collectivism, masculinity vs. femininity, and power distance. A fifth dimension, long-term vs. short-term orientation, was later added to the model (Hofstede and Bond, 1988). Given that this model is the most prominently used in previous work, this research will use Hofstede's cultural model to define the construct of cultural values, which is distinctly lacking in current OCR research.

3 METHODOLOGY

The research will adopt a positivist philosophy, since this paradigm emphasises empirical methods and the employment of quantitative methods such as surveys (Veal, 2006). The research will utilise a deductive reasoning process, since it aims to deduce hypotheses through theoretical consideration, which will then be tested via statistical analyses. A quantitative research style has been identified as the most appropriate, utilising a multi-item survey method to gauge KSA residents' perceptions of OCR's pertaining to KSA tourist attractions. Items for the proposed model constructs will be adapted from items that have been implemented in previous research. The reliability and validity of the scales will be established prior to the testing of the hypothesised relationships between the variables. The research model will be analysed using AMOS 20, a structural modelling technique which will provide the means to assess and modify if necessary the proposed theoretical model (Anderson and Gerbing, 1988).

4 EXPECTED RESULTS

The current research expects to find that that cultural values will directly influence subjective norms, which will in turn, affect perceived usefulness and trust of OCR's, and subsequent behavioural intentions to visit a domestic tourism destination. It is also expected, as per previous work, that source credibility and argument quality of OCR's will affect perceived usefulness and perceived trust of OCR's, therefore affecting behavioural intentions to visit a particular destination.

5 CONCLUSION

The proposed theoretical model is based on an integration of IAM and TRA. The IAM explains how information from the characteristics of OCR's are adopted (Sussman and Siegal, 2003), whilst TRA components explain how the consumer intends to behave towards the information (Ajzen and Fishbein, 1980). Crucially, the model will also incorporate the construct of perceived trust as a related consequence of perceived information usefulness, as posited by the PDA (Elwlada et al., 2016). Therefore, the model proposed in this study offers a comprehensive theoretical approach as to how potential travel consumers adopt information

from OCR's and the affect this has on their domestic travel behavioural intentions, accounting for source credibility (comprising of website and review provider credibility) argument quality, and subjective norms, which the research will assume is directly influenced by cultural values.

The proposed model could therefore provide a new approach for travel marketers to consider in how OCR's assist in domestic tourists 'destination choice. For example, tourism businesses could utilise the model to attract both domestic and international tourists. Therefore, this research develops a new theoretical model in order to understand this notion.

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Technophobia and its Effects on Travel Decision-Making

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Abstract

The importance of Information and Communication Technologies (ICTs) is extended in society and across various industries, including tourism and hospitality. Due to the specific nature of tourism and hospitality – belonging to both space and time – tourism and hospitality companies find ICTs relevant and important for a variety of purposes (Raubal and Rinner, 2004). Due to the significant growth of technology applications in the tourism and hospitality environments, it is critical to understand the customer perception towards these innovations. However, not all consumers choose to use ICTs in their tourist experiences, nor do all consumers see these technologies as improvements. Therefore, the interest in this research topic is primarily based on the investigation of how the emerging notion of technophobia influences both tourist behaviour and tourism and hospitality settings in technology-mediated context. This study adopts a sequential exploratory approach of a mixed method design in order to propose a conceptual model for the implications of technophobia for travel decision-making and tourism and hospitality industries.

Keywords: Technophobia, Information and Communication Technologies (Icts), Tourist Behaviour, Decision-Making.

1 THEORETICAL BACKGROUND AND PROBLEM STATEMENT

The fast-growing tourism and hospitality industries are entangled with the progress of Information and Communication Technologies (ICTs). Nowadays, there are various ICT applications (e.g. Internet-based technologies; mobile applications, social media etc.) with great potentials to influence tourist experiences (Law et al., 2009). Indeed, it has been shown that new technology applications and consumer devices are effective instruments to engage consumers throughout their journey in tourism and hospitality experiences. Furthermore, with the emergence of World Wide Web, Internet-based services, mobile applications and other ambient technologies create opportunities for persuasive interactions (Lehto et al., 2012; Cassel et al., 1998). A growing number of ICT applications (e.g. social media, mobile technologies and context-aware systems, ambient technologies, Augmented Reality (AR) and Virtual Reality (VR) applications, and others) have influenced tourists' attitudes towards tourism and hospitality services and their behaviours. Furthermore, an increasing amount of innovative technologies have been introduced into tourism and hospitality domains, such as self-driving cars equipped with artificial intelligence, hotels staffed with robots, voice-activated hotel rooms etc.

Despite the benefits, a lot of concerns about technology adoption in the travel industry continue to arise among tourists, causing their resistance to use these technologies during their travels. These concerns are often rooted in technophobia (i.e. fear of technology) and hesitation to give up autonomy and control of important aspects of human life to technology (Glancy, 2012). Furthermore, there are numerous interpretations of the phenomenon of technophobia, as they have become more complex as technology continues to evolve. While most academic literature provides general insights on technology-related anxiety (e.g. Igbaria and Chakrabarti, 1990; Brosnan, 1998; Kai-ming and Enderwick, 2000), research on technophobia in tourism and hospitality domains is relatively rare. Several studies on technophobia show a humans' resistance to technology, leading to the avoidance of new technological trends, such as fear of robotics, driverless cars, artificial intelligence etc. (Dietterich and Horvitz, 2015; Tussyadiah et al., 2017). The trend that tourism and hospitality industries are adopting more innovative technology applications such as artificial intelligence

and robotics might be perceived as threatening human capabilities and the society. Therefore, in order to forecast the adoption rate of these innovative technologies a clear understanding of general attitudes towards technology, including factors of risk and trust are essential to be examined.

In synthesising some existing gaps in research, it appears that there is need for further exploration of the phenomenon of technophobia. Specifically, a better understanding is required in view of the causes of technophobia on travel-related activities and how to prevent them. Thus, the overall *aim* of this research consists in the investigation the phenomenon of technophobia in travel decision-making process by analysing the factors of risk and trust in the adoption of technology in tourism and hospitality contexts. Specifically, the research will investigate how technophobia affects tourists' decisions and what are its consequences on tourism and hospitality industries. In order to fulfil the above stated aim, the sequent research *objectives* have been defined.

1. To explore how the role of technology in tourism and hospitality domains is perceived by customers and providers.
2. To analyse the emerging concept of technophobia and its antecedents in tourism and hospitality industries.
3. To identify the factors of risk as a core component in technology anxiety towards technology adoption in tourism and hospitality.
4. To determine the factors of trust in technology as a catalyst of attitude change towards the use of technology in tourism and hospitality.
5. To develop a conceptual model on the implications of technophobia in tourism and hospitality.

It is worth mentioning that the research objectives will guide all the stages of the study, by informing the literature review, methodology, data collection, and the anticipated results of this research.

2 METHODOLOGY

The exploratory stage of the research aims at gaining further insights on technophobia and outlining negative and positive attitudes towards technology and its antecedents and correlates factors such as risk and trust towards technology through the Human-Technology Interaction lens. The exploration of phenomenon of technophobia requires critical perspectives on how both tourist consumers and tourism settings conceptualise this notion. Mixed methodology will be adopted because of the specific trait of the proposed research topic. Furthermore, a mixed-method approach will help to reinforce results and eliminate possible limitations under the study. The rationale for this choice is primarily based on the review of previous research on this topic and the particular research aim of this study. Specifically, a sequential exploratory approach of mixed method design will be adopted. It will include an initial phase of the qualitative data collection by means of semi-structured interviews and their analysis, followed by the collection of questionnaires and analysis of quantitative data.

This research phase initiates with the *qualitative* data collection. The interviews will provide rich data on user preferences as well as perceptions and expectations on technology adoption. In order to determine appropriate cases for the interviews, specific tourism and hospitality establishments will be identified through the research process. The selection of these settings will be based on a set of eligibility criteria, such as technology use, innovativeness, best practice ICT-related applications, and the like. It is expected that the representatives from

selected companies reveal holistic insights on the concept of technophobia and how it can influence the tourist experience in certain destination contexts.

The next method applied in this research stage is the *quantitative* data collection through questionnaires. Tourists, who are expected or expect to use technology while travelling, will be invited to participate in the survey. Furthermore, a questionnaire-based survey allows conducting a broad characterisation of tourists by estimating their perceptions towards technology taking into account their socio-economic background, gender, age, culture, religion, ethics, privacy issues, values, and past technology experience, which may help to identify the basis for any technology anxiety from the customers' perspective.

3 ANTICIPATED RESULTS

This research expects to generate valuable contribution on both the theoretical and applied levels. It will contribute on the theory of technophobia and trust in technology, in which it provides a deeper understanding of the significance of the innovative element both in trust and risk factors of technology adoption. The results of this research will contribute to the marketing theory of consumer behaviour with regards a person using or not using the available technologies while travelling, which will further assist tourist destinations, hotels, Destination Management Organisations (DMOs), Online Travel Agents (OTAs), and other relevant tourism and hospitality players in the strategic adoption of innovative technologies in the future. The findings from this study will be argued to have the potential of reducing the technology anxiety in tourism and hospitality contexts and increasing the smart use of travel technologies.

4 CONCLUSION

The transformational power of ICTs has brought a number of critical implications on the nature of tourism and hospitality domains. ICTs make information more ubiquitous, which has not only changed the individuals' behaviour, but also revised the role of human beings in society (Barwise et al., 2006). However, the adoption rate of several technological innovations remains a critical issue in order to measure its success to shape the future of tourism and hospitality industries (Tussyadiah et al., 2017). Furthermore, the trend of increasing concerns about innovative technologies is continuing to grow. These issues have primarily originated from the notion of technophobia resulting in understanding technology as a dehumanising phenomenon (Tussyadiah et al., 2017). Alongside with fear, trust in technology represents another important concept which measures the degree of technology anxiety. Trust has always been considered as a factor of strategic importance in understanding the consumer acceptance of technology (Tay, Jun, and Park, 2014), and it is a basic element in Human-Technology Interaction. As long as this research will explore the effects of technophobia on travel decision-making, it will generate value for tourism and hospitality stakeholders by providing them with practical instruments to enhance their competitive advantage and increase business efficiency by improving customers'experiences.

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Hotel Website Evaluation Model in the Context of Web 3.0 Paradigm

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Abstract

Tourism is a vital sector whose development provides growth opportunities and social benefits for all countries. Realization of its benefits requires careful design and implementation of environmentally, socially, and economically grounded integrated policy frameworks as its development is a complex affair. Web 3.0 offers a new level of connectivity, communications, and information on customers, including their attitudes and preferences which can be used to enhance online marketing of hotels through their websites. However, studies show that the level of uptake of current web technologies in Tourism and Hospitality websites nearly fail completely to take advantage of such technologies. They either don't use them at all or use them minimally and mostly inappropriately. This research seeks develop a hotel website evaluation model in the Web 3.0 era. Mixed research design that will combine content analysis, focus group interviews and fuzzy analytic hierarchy process will be used to collect both qualitative and quantitative data. Online tools will be used to collect and analyse data from hotel websites.

Keywords: Hotel Website; Web 3.0; Semantic Web; Website Evaluation.

1 INTRODUCTION

The technological environment within which modern hotel industry operates is becoming increasingly complex, offering new possibilities but also giving rise to challenges. There has been a continuous evolution of Web technologies and how they are used since the introduction of the Internet. Some of the technological trends that are likely to have a significant impact on Tourism and Hospitality industry are (De Freitas & Conole, 2010) a shift towards ubiquitous and networked technologies, the emergence of context and location aware devices, a trend towards more mobile and adaptive devices as well as a technological infrastructure which is global, distributed and interoperable.

These developments in digital technologies are shifting the balance of power towards the consumer. As in other sectors, hotel industry is feeling the impact of a much deeper trend where the guests have a higher say. Some of the ways in which digital age is affecting hotel industry are the empowerment of tourists, accelerated competition and globalization of markets. These have created a fundamental challenge for strategy development processes in hotel industry. The new strategy development processes need to be founded on deeper insights about tourists, not simply how they behave, but what motivates them. The strategy also requires insights from global experiences that can be translated into competitive advantages. From marketing perspective, some of the themes that hotel sector in consumer-led economy can focus on are personalization, integration of data, business model and keeping the brand relevant to attract the business and leisure guests of tomorrow (Saunders, 2015).

Online marketing through a website is one of the best channels hoteliers have to brand their business and showcase their products and services to a large audience (Khalifa & Abou-Shouk, 2014). However, having a website is not a guarantee to success in the turbulent market. The main limitation of today's Web is the data heterogeneity and isolation (Fensel, et al., 2016), everything is on the Web, but there is luck of tools of locating and processing what's already there. Currently, most hotel websites are developed on Web 2.0, which is a collection of linked documents that are indexed by search engines and searchable by keywords.

To overcome the limitations of Web 2.0, hotels must now shift to a more promising Web 3.0. Since its creation by Tim Burners-Lee in 1989, the Internet has evolved over time from Web 1.0, the read only Web to Web 2.0, a read and write web to the current Web, Web 3.0, a read, write and execute Web. Web 1.0 was the first generation of the Web which featured essentially static content posted by the producer and passively consumed by the user. Web 2.0 is all about people, collaborations and media, it is a scenario where the computers do the easy task of the presentation and people do the hard task of linking and interpreting data and information. The main obstacle to provide better support to Web users is that, at present, the meaning of Web content is not machine readable. Tools to retrieve texts exist, but they cannot interpret and extract useful information for the user from a sentence.

Web 3.0 presents a scenario where machines will read web pages much like humans and Internet "user agents" such as search engine spiders will troll the Internet to find precisely what a user is searching for. A case where Web provides the necessary conditions for individuals and organizations to use information in ways that facilitate the exchange of content, independently of the devices and the networks (Almeida, et al., 2013). The concept of Web 3.0 comprises of the semantic technologies, Social Web, open standards, Internet of Things (IoT) and Pervasive and Ubiquitous computing as well as Open Source Software, OpenID and cloud computing which can be applied to the current Web (Murugesan, 2010; Basistha, 2014). The key features of Web 3.0 are intelligence, (data can be understood by both computer and human beings), integration (Web 3.0 can integrate the user generated content (UGC) by Mash-up, to strengthen the characteristic of the content and simplify the information search) and personalization (process and analyse user's personal preference) (Lai, et al., 2013; Almeida, et al., 2013).

Semantic Web, a major element of Web 3.0 aims at increasing the usefulness and the relevancy of the information on the Web, it refers to data published on the Web in such a way that it is machine-readable, its meaning is explicitly defined and linked to other external data sets, and can in turn be linked from external data sets (Bizer, et al., 2008). From a marketing perspective, Web 3.0 offers opportunity in increased measurement and market research capabilities, along with a shift in the way content for websites is approached and from a user standpoint, it increases the value of the Web exponentially.

In a study carried out to establish the level of uptake of current web technologies, it was found out that most hotel websites nearly fail completely to take advantage of such technologies, either by not using them at all or by using them minimally and mostly inappropriately (Duerra, et al., 2013; Stavrakantonakis, et al., 2014). Some of the website features perceived as important in previous studies may be obsolete in the context of current Web technologies (Lin, 2015; Leung, Law, & Lee, 2016).

Despite a large volume of studies available in the literature, none of them provide an extensive analysis of uptake of the Web 3.0 technologies in the hotel website domain nor provides guidelines on how to evaluate hotel websites in Web 3.0 era. There is a gap between existing Web 3.0 technologies and their adoption in hotel websites (Nikola, et al., 2014). This research aims at developing a hotel website evaluation model in Web 3.0 era using data from Kenyan hotel websites. The objectives of the study are; (i) evaluate the exploitation of Web 3.0 applications in hotel websites, (ii) evaluate the exploitation of Web 3.0 technologies in hotel websites and (iii) develop a model for evaluation of hotel websites in Web 3.0 era.

2 LITERATURE REVIEW

2.1 Web 3.0 Technologies

Web 1.0 and Web 2.0 were built predominantly for human consumption and for web content to be consumed by machines, they expect some amount of structured data. To achieve this, technology that can add structured data to HTML pages directly are required. RDFa, Microdata and Microformats are some of the technologies that allow just that (Meusel, et al., 2014). In the Web 3.0 context, intelligent machines read, understand, interrelate, and can manipulate data from cyberspace, allowing this process to be adapted by different users or business sectors to their own needs. In addition, Web 3.0 technologies allows listening, learning and cooperation, so that each user or stakeholder can be treated differently, according to their preferences, at all times.

Pervasive element of Web 3.0 refers to a Web that is virtually everywhere, on every mobile device, every computer, and any other device that can have memory embedded on it. It refers to the idea that people are permanently connected to the Web without even thinking about it. The technology that enable this vision is the Web services for devices profile. This is a lightweight version of Web services, and it allows for embedding a Web service architecture based program into any device, in order to request services through open Web standards. In Ubiquity computing, people can be connected anytime and anywhere. A multiplicity of communication options like mobile networks, Wi-Fi networks, cable networks or fibber networks in addition with different types of devices like laptops, desktops, tablets and an infinity set of mobile devices are facilitator to stay connected (Almeida, et al., 2013).

Through the pervasive and ubiquitous Web, users should be able to access and manipulate information where and when it matters even while on the move (Rajiv & Lal, 2011). To cater for variety of devices, website developers have three options in web development. They can either use Responsive Web Design (RWD), Adaptive Web Design (AWD) or Separate URLs (also known as mobile friendly). Responsive design is a design technique that, generally, enables web developers to build one site that serves desktops, tablets and smartphones, with experiences optimized for each device (Internet Retailer, 2015). RWD involves serving the same HTML code on the same URL, regardless of the users' device; render the display differently based on the screen size. AWD also known as (Dynamic serving) is using the same URL regardless of device, but generating HTML code dynamically by detecting the browser's user agent. Separate URLs involves serving different code to each device and a separate web address for the mobile version (Borodescu, 2017).

More than 21% of online bookings and nearly 19% of room nights are generated from non-desktop devices (smartphones plus tablets), while 45% of web visitors and nearly 40% of page views come from tablets and mobile devices (Starkov & O'Brien, 2016). In a study conducted to assess the implementation of responsive web design (RWD) that analyzed 470 websites of various categories and countries established that the majority of analyzed websites were not created using the latest technologies and are not adaptive to various mobile devices (Subić, et al., 2014).

In 2014, Google introduced "Mobile-friendly" tags in its search results to make it easier for mobile searchers to find mobile-optimized content (Devaney, 2015). In April 2015, Google launched its mobile-friendly algorithms update, giving preferential rankings to websites deemed by Googlebot as being "mobile friendly" (Google, 2015). These developments in the world of the Web will adversely affects the online hotel websites as it significantly impacts search results. For websites to be as discoverable and as accessible as possible, they need to be mobile ready.

With more than half of all new internet connections coming from mobile devices, ensuring great performance for mobile users has become critical. Optimizing for speed on mobile has its own challenges, including the need to account for reduced bandwidth and increased latency on mobile networks and reduced processing power on mobile devices. Some of the techniques that can be used to overcome these challenges are reducing server requests, reducing page size and use of caching and minification of files. Server request number is the top slowdown factor for mobile sites (Catlin & Desikan, 2012). To reduce the requests a page makes, developers can combine CSS and JavaScript files, embed binary data for images in CSS files via data URIs, and load images and content only when scrolled into view.

For page size, developers can use CSS3 instead of images for stylistic elements such as rounded corners, gradients, and shadows; serve resized images, depending on screen size, reduce image size by adjusting compression and quality, combine or "sprite" images for serving through CSS and use Gzip compression for code. By using HTML5's new abilities that allow persistent caching of files and data that survives browser sessions and power cycles, developers can enhance page caching. Minification, a process of removing unnecessary or redundant data without affecting how the resource is processed by the browser can also be employed to reduce page size.

The Social Web describes how people socialize and/or interact with each other throughout the Web. Such people are brought together through a variety of shared interests. Social media directly influences more than 83% of all online bookings, and 49% of guests won't even consider booking a hotel that doesn't have reviews. Guests want to know that they booked the right hotel, so they are willing to pay more for hotels with higher scores. Sites with trusted reviews and scores integrated on their website are crawled up to 200% more frequently (Pomponio & Viale, 2013).

2.2 Model Development

Website development process involves functionality (content), usability (design) and technology considerations. The optimal combination of functionality, usability and technology presents a state of uncertainty and inaccuracy. The technologies for modeling uncertainty include Bayesian probability, Dempster-Shafer theory, Fuzzy Logic, and Certainty Factor. The proposed model will be modelled using the fuzzy logic.

Fuzzy logic is an extension of Boolean logic by Lotf Zadeh in 1965 based on the mathematical theory of fuzzy sets, which is a generalization of the classical set theory. Fuzzy logic introduces the notion of degree in the verification of a condition, thus enabling a condition to be in a state other than true or false, it provides a very valuable flexibility for reasoning, which makes it possible to take into account inaccuracies and uncertainties (Dernoncourt, 2013). Fuzzy logic was preferred because it has the ability to formalize human reasoning in rules that are set in natural language.

2.3 Hotel Websites Evaluation

A review of website evaluation in tourism research for papers published between 1996 and 2009 revealed that methodological approaches used for evaluation of tourism website were counting, user judgement, numerical computation, automated and combined methods (Law, Qi, & Buhalis, 2010). Law et al. (2010) suggest that to enhance the research methodology, theories, algorithms, and models from other disciplines could, and should, be incorporated into the tourism website evaluation process. The study will use dialogic theory of communication and fuzzy analysis hierarchical process.

According to Lu and Yeung (1998), an effective ecommerce website usefulness is determined by its usability (design) and functionality (content). Usability engineering is the key to successfully conducting commercial website design (Downing & Liu, 2011), and therefore usability can be equated to design. As reported by Leung, Law and Lee (2016), website functionality is concerned with whether the website provides sufficient information to help users accomplish their intended purposes. According to Nielsen (2004), usability refers to the website's ease of use, which is accomplished at the time of design. A usability research posits that the success of a website is tied to how technology is able to match the web interface (front-end) with the hotel's processes (back-end) in an integrated way to create synergistic and symbiotic effects (Cheng & Hamid, 2011).

Functionality based hotel evaluation model have been studied in the recent past (Hidayat, 2011; Ip, et al., 2012; Qi, et al., 2013; Leung, et al., 2016) as it is more critical given that information provision is the basic goal of a website. The information provision function of a website will be brought a notch higher by integrating Web 3.0 technologies in a hotel website.

There is no doubt about content being the king in a website, but two websites with the same content will not have same performance with respect to website quality attributes such as online visibility, mobile readiness, download speed, online security, etc. With respect to usability, the existing models fail to capture nature of computing devices in pervasive and ubiquitous computing age. Since Web 3.0 technologies started appearing in the year 2008 and were expected to reach maturity in the year 2016, thus this is the time that evaluation models incorporating Web 3.0 technology and techniques are expected to start appearing.

Rababah et al. (2011) defines website quality is a "customer's judgment about the website's overall excellence or superiority, which is an attitude that comes from a comparison of expectations and perceived performance" (Rababah, et al., 2011). From this definition, there is an aspect of performance which is derived from the software (technology) and development techniques that ought to be guided by quality standards. Hotel website developers need to use standards and best practices to ensure the all-round success. However, the current standards do not incorporate Web 3.0 technologies that can predict the quality a website under development is going to achieve.

Thus, it holds that the technology behind any hotel website is, in essence, the virtual organization and functional operation of that site. Therefore, its logical to conclude that the quality and evaluation methods of a hotel website is a function of the quality of applications they contain and their ability to meet end-user requirements. Since Web 3.0 is associated with a host of technologies such as Artificial Intelligence, automated reasoning, knowledge representation, Ontology, Semantic Web, Software Agents, Internet of Things just but to name a few. Thus, there is need for researcher to develop hotel website evaluation model that factor in changes in the Web technologies landscape. This is also supported by the fact that principles of good design change much more slowly than computer technology does, and therefore there is need for regular review of technical dimension of website quality than the functionality and usability dimensions.

2.4 Tourism and Hospitality Industry in Kenya

Kenya is strategically located on the East Coast of Africa bordering the Indian Ocean to the east, Lake Victoria to the west, and with five neighbouring countries. Ethiopia borders Kenya to the north, Somalia to the northeast, Tanzania to the south, Uganda to the west and Southern Sudan to the northwest. Kenya occupies an area of 224,081 square kilometres with a

population of about 45 million people. (Messerli, et al., 2010). Safari, coastal, and business and conference travel makes up Kenya‘s major tourism product lines with cultural heritage tourism activities cutting across each of them. The wildlife safari is considered the crown jewel of Kenyan tourism.

3 THEORETICAL BACKGROUND

This study will be modelled on the five principles of dialogic theory of communication (Kent & Taylor, 2002). It’s a theory-based strategic framework to facilitate the relationship with public though the Web. The five principles are; (i) dialogic loop, (ii) generation of return visits (RV), (iii) usefulness of information, (iv) intuitiveness/ease of the interface and (v) the rule of conservation of visitors.

As used in the research, Social Web is a good platform for implementing the dialogic loop principle. The advantages of semantic Web can enhance Social Customer Relationship Management (SCRM) which builds upon Customer Relationship Management (CRM) by leveraging a social element that enables a hotel to connect guest conversations and relationships from social networking sites in to the CRM process (Almeida, et al., 2013). The dialogic loop in Web 3.0 focuses on community and relationship building via social venues (e.g., Facebook and Twitter). The communication goes beyond hotel-to-guest, but also guest-to-guest and guest to prospective guest. Guests can collaborate with hotel directly or indirectly to improve products, services, and the guest experience through hotel guest co-creation. Co-creation is a form of economic strategy, that brings different parties together in order to jointly produce a mutually valued outcome (Prahalad & Ramaswamy, 2004).

The second principle explores ways to create the foundation for long lasting relationships through the generation of RV. With respect to Web 3.0, the insight gained from the user can be used to enhance his/her online experience. Customization of content presented in Web 3.0 will be based on a solid user profile refine which will allow a better guest experience with the web pages (Almeida, et al., 2013). RV will also be supported by scaled up trust and privacy in Web 3.0, enabling the identity management (Verizon, 2010) and use of OpenID, which provides a potential security safety net. Even if a site gets hacked, OpenID tourists won’t be affected since the site in question is not storing their log-in information.

Hotels in this digital era use websites to provide support for tourist through the range of travel activities from inspiration, preliminary search, to comparison, decision making and booking (Neuhofer & Buhalis, 2014). Web 3.0 enhances the usefulness of these information through its personalization feature where information can be segmented and contextualized by individual interests and by each network contact (Almeida, et al., 2013). Web 3.0 is better equipped to provide the required information to the users by searching, organizing and presenting only the relevant information (Prabhu, 2016). These, coupled with the objectives of Semantic Web which are to identify and provide the exact required data that matches the keywords provided by the user enhances the information provision principle of dialogic theory of communication (Rajiv & Lal, 2011).

The pervasive and ubiquitous elements of Web 3.0 guarantee the development of mobile ready websites that is responsive or adaptive to the guest device. This corresponds to the fourth principle of Dialogic theory of communication. The fifth principle, the Conservation” is a tool for fostering relationships out of respect for the valued visitors, the rule maintains that organizational web sites should include only essential links to other related sites. Web 3.0 is about pervasive and ubiquitous computing, where the hotel website is optimized for mobile computing devices. The load time is minimized through responsive and adaptive web design

techniques. The web 3.0 has the capability to add features that will allow the guest to benefit from vastly personalized experience; context-aware, precise response; efficient management of time spent on the Web; much more personalized Web experience which can retain a customer on website (Sabbagh, et al., 2011).

4 METHODOLOGY

This study is going to employ mixed research designs that combines content analysis, Focus Group discussion and fuzzy Analytic Hierarchy Process (AHP) (Bhattacherjee, 2012; Krosnick, et al., 2015). The target population are star rated hotels in Kenya which will be obtained from Tourism Regulatory Authority (KTA) Kenya Gazette Notices Vol. CXVII_No 94 and Vol CXVIII No 28 of 2016 (Tourism Regulatory Authority (TRA), 2015, 2016). The sample size will be determined using Yamane formula (Israel, 2013, Singh & Masuku, 2014).

$$n = \frac{N}{1 + N(e)2}$$

Where n is the sample size, N is the population size, and e is the level of precision.

The approximate number of three star and above hotels in Kenya is estimated at 120. Stratified sampling will be employed with 5 star, 4 star and 3 star hotels as the stratum. Simple random sampling will be used for selection of items for the sample from each stratum. The sample size of each stratum will be proportionately allocated to tally with the sizes of the samples from the different strata.

Table 1: Three to five star rated hotels in Kenya (TRA, 2016)

Category of Establishment	3 Star	4 Star	5 Star	Total
Vacation Hotels	8	8	2	**18**
Town hotels	18	12	8	**38**
Lodges	15	9	2	**26**
Tented camps	7	10	2	**19**
Villas, Cottages & Apartments	3	1	1	**5**
Restaurant	1	0	1	**2**
Total	**52**	**40**	**16**	**123**

See Table 1 for summary of three to five star rated hotels in Kenya.

Focus groups discussions will also be used to validate the data and information in the model development phase. Focus group is a type of in-depth interview accomplished in a group, whose meetings present characteristics defined with respect to the proposal, size, composition, and interview procedures. (Freitas, et al., 1988). The focus or object of analysis is the interaction inside the group. Focus group discussion was chosen because it presents a scenario where people tell their perceptions on the topic, thus providing a deeper understanding of the phenomena being studied more economically which cannot be so easily achieved in an individual interview or other form of data collection. Sampling in Focus Group discussion will be purposive. Each interview will include two hotel customers, two hotel managers, two hotel website designers and two senior researchers in Web engineering. This will bring the total number of participants in the focus group discussion to eight, but as a common rule of thumb is to over recruit by 20% (Freitas, et al., 1988; Morgan, 2013). The study will summon about 20% more than the minimum to assure that at least the minimum

number will appear. Researchers suggest that focus group should be small enough that everybody has an opportunity to share his perceptions, and big enough to provide diversity of perceptions with ideal number placed between four and 12 (Morgan, 2013). Hotel customers will be those who have made an online reservation through a hotel website in the past 12 months. Managers and designers will be those who have been involved in hotel website development or maintenance.

The research data will be collected using automated tools. An automated approach is useful for testing the technical performance of certain features of a website using software systems. The advantages of an automated method include consistency in evaluation and is a relatively faster process, compared to human based (Law, et al., 2010). See table 2 for the online evaluation tools. The online tools will be used to gather and analyse data and information regarding mobile readiness of websites**,** usage of various types of technologies on the Web, detect and identifies structured data in a website.

Table 2: Automatic data collection tools

Tool	URL
Google Mobile Friendly Test	http://google.com/webmasters/tools/mobile-friendly
World Wide Web Technology Survey	http://w3techs.com
OpenLink Structured Data Sniffer	http://osds.openlinksw.com
WhatCMS.org	http://whatcms.org
Structured Data Testing Tool	https://search.google.com/structured-data/testing-tool/u/o/
Built with	http://builtwith.com

See Table 2 for automatic online data collection and analysis tools.

Table 2: Online Visibility Attributes

Dimension	Definition	Benefit for Webpage
Header Tag Length	Title of a post	Helps search engines to understand the content of a page
Meta Description Tag	Description used by search engines to index web page	It gives search engines a summary of what the page is about
Image Alt Attributes	provides textual equivalents for non-text content in web pages	Enables search engines to better understand the content of images and index them
Text to HTML Ratio	Shows the density of HTML code in a web page	Determines the identification of user content by search engines
Number of Backlinks	links from other websites to the website	Determines Website's popularity and search engine ranking
Robots.txt	It tells well behaved crawlers whether to crawl certain parts of the site or not	Enable optimal management of crawl budget
XML Sitemaps	An XML file listing web pages in a website	Allows search engines to crawl the site more intelligently

Since hotel website is meant for provision of information, it is important that it is made visible online. See Table 3 for the dimensions that will be collected to evaluate the visibility of hotel websites.

Table 3:Structured data, Social Widget and IP Version basic data dimensions

Dimension	Definition	Benefit for Webpage
JSON-LD	Light-weight linked data format	Enables JSON data interoperate at Web scale
RDFa	A way of publishing linked data in HTML5 document	Solves both data silo-ing and data linking problem
Microdata	Embeds machine-readable data in HTML documents	Provide a richer browsing experience for users
CMS	Web-based applications for creating and managing the content of a website	Quick and easy page management, Consistent brand and navigation and enhanced security
Site Elements	Optional technical properties or features of websites e.g. CSS, cookies, E-tag etc.	Enhances user experience
Social widgets	Programs that allow visitors to interact socially in a website	Help increase brand awareness and drive traffic to a website
IP address version	Numerical equivalence of domain name	Indicates IoT he readiness

See Table 4 for the technologies and Social media dimension.

Table 4: Performance enhancement techniques

Dimension	Definition	Benefit for Webpage
Page Size Info	Size of page elements in Megabytes	Determines loading speed of a website
No of Hosts	Individual servers being contacted.	Determines loading speed of a website
GZIP Compression	Used to compress the website size	Significantly reduce page size and load time for the user
Minification of files	Process of removing unnecessary data without affecting how the resource is processed by the browser	Significantly reduce page size and load time for the user

See table 5 for performance enhancement techniques dimensions.

Table 5: Mobile readiness dimensions

Dimension	Definition	Benefit for Webpage
Viewports	The user's visible area of a web page	Controls how a webpage is displayed on a mobile device
Legible Font Sizes	Characteristic of a font	Easily readable on different sized screens
Tap Target Sizing	Size of tap targets in a touchscreen	Eases the users task of touching a tap target
Desktop Speed	Speed with which web pages/media content loads in a desktop computer	Fast download speed amplifies visitors' engagement and retention
Mobile Speed	Speed with which web pages/media content loads in a mobile device	Fast page download speed amplifies visitors' engagement and retention

See Table **6** for mobile readiness dimensions

Table 7: Security and analysis dimensions

Dimension	Definition	Benefit for Webpage
SSL management	Standard security technology	Ensures that all information handled stays private and secure
Traffic Analysis	Measuring, analysing & reporting of data collected from the Internet with the aim of understanding and optimizing web experience.	Optimized web experience for users
Software update information	Server software update information	Enhances security
Email Privacy	No email address has been found in plain text	No email address has been found in plain text

See Table **8** for security and website analytics dimensions.

4.1 Model Development

Literature review and research data gathered from content analysis will be used to develop a comprehensive list of website features, functions and technologies for model development. This will be followed by two rounds of focus group interviews that will be conducted with multiple stakeholder groups to verify the techniques, functions and technologies to be included in the model. The findings from the first focus group interview will be further discussed in the second focus group interview, to refine the model. AHP is commonly used decision making tool in various multi-criteria decision making problems. Ip et al. (2013) used fuzzy AHP to model the evaluation of hotel website functionality.

To further refine the proposed model, fuzzy analytic hierarch process (AHP) approach will be used to prioritize relative importance of criteria and sub-criteria of hotel website quality criteria. The approach involves triangular fuzzy numbers and analytic hierarchy process to develop a fuzzy APH model. This is to complement the human judgement that is often uncertain and vague, the use of fuzzy set theory rather than exact numbers enable us to capture decision makers' uncertainty

AHP will be used to compare different alternatives with respect to various website technologies and techniques to provide support in a multi criteria decision problem. The objective of a website dimension will form the first level, the criteria and sub criteria will be in the will form the second and third levels respectively. The final objectives will be in the fourth level.

Fuzzy logics approach will be used to complement AHP's limitation in vagueness for personal judgement. Then F-AHP, the pair wise comparisons of both criteria and the alternatives will be performed through the linguistic variables, which will be represented by triangular numbers. Triangular fuzzy numbers are a special class of fuzzy number that is defined by three real numbers, expressed as (*l, m, u*). See Equation (2) for the triangular fuzzy number is presentation.

$$\mu_A(x) = \begin{cases} (x-l)/(m-l), & l \le x < m, \\ (u-x)/(u-m), & m \le x \le u, \\ 0 & otherwise \end{cases}$$

where *m* is the most possible value of fuzzy number A, and *l* and *u* are the lower and upper bounds, respectively, which are often used to illustrate the fuzziness of the data evaluated. From this, the central value of a fuzzy number is the corresponding real crisp value while the spread of the number is the estimation from the real crisp number as reported by Ip, et al. (2013).

1 CONCLUSION

The research is in its early stage of data collection and therefore the discussion at this stage is limited. However, the model to be developed in this study will enable hoteliers to assess their websites and be informed of the new features that start to appear in other hotels websites and in web marketing generally in order to foster a long-term relationship with customers. Academics could also use it as a tool to evaluate hotel websites and their intentions. It will give new ideas to web designers and especially to those who work on Tourism and Hospitality web pages. Tourism authorities could take active role by informing, educating and financially supporting domestic Tourism and Hospitality to increase the richness of their website contents.

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The Unattractiveness of Apprenticeships in Tourism: An Approach to Solving Current and Future Challenges

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Abstract

Working in tourism, especially for young Austrian citizens, seems to be unattractive, as current figures present a severe decline of apprenticeships in tourism. Austrian governmental organisations have undertaken certain efforts and established numerous activities to rise the numbers of traineeships. This paper raises questions, formulates hypothesis and gives an outline of the research methodology of the author's dissertation. The intention of the author's dissertation is to discuss influencing factors on job decisions related to tourism of young people in Austria. Moreover, both the knowledge about working in tourism in general and its attractiveness is examined. The research design compiles data from parents who have children aged 14 to 16, current trainees and pupils in the age of 14. Data will be collected from mentioned respondents working in tourism and not working in tourism but also in tourism and non-tourism regions. The findings will bring essential knowledge of influencing factors of tourism related job decisions of young people and will contribute to current discussions of Austrian authorities about challenges on future tourism labour markets.

Keywords: Working In Tourism; Apprenticeship; Job Decision; Labour Market

1 PROBLEM STATEMENT AND THEORETICAL BACKGROUND

Tourism and the leisure industry represents a major part of the Austrian economy and contributes around 13.4% to the national GDP (STATISTIK AUSTRIA, 2016a). With its approximately 203,000 employees (WKO, 2016a), tourism employs 5.7% of the total labour force of Austria (Hauptverband der Sozialversicherungsträger, 2017). In 2016, 8,788 trainees were receiving apprenticeship training within tourism. Austria-wide this represents about 8.2% of the total number of apprentices. We see a steady decrease of young people willing to start their careers in tourism by completing a traineeship (2004: 13,748; 2016: 8,788 = minus 36%). In fact, there is also a decline in the number of people participating in traineeships in general (2004: 119,071; 2016: 106,950), but this decrease is about 10.2% and thus not as high as the figures in tourism (WKO, 2016b; WKO, 2017).

In 2015 new record figures were reached in Austria with some135.2 million overnight stays. This represented a plus of 2.2% in the winter season and in the summer season even 3.3% compared to the figures of 2014 (STATISTIK AUSTRIA, 2016b). Because Austrian tourism is a thriving industry, one cannot blame low economic growth for the above-mentioned falling apprenticeship figures. In fact, there were 1,485 traineeship openings and only 469 youths seeking such apprenticeships in 2015. About 10% of all apprenticeship positions in tourism are subsidized by the Public Employment Service of Austria, which means that if this support money were missing, the figures would likely even be worse. (BMWFW, 2016) There is a problem with tourism's attractiveness, since even many hospitality students do not think that working in tourism will fit their expectations (Richardson, 2008; Bahcelerli and Sucuoglu, 2015).

Above-mentioned conditions have led to several actions carried out by different Austrian authorities and organisations during the last decade:

- the guide "Karriere im Tourismus – du bist dabei!"
- the leaflet "Mit Stil zum Ziel"
- the project "get a job – deine Chancen im Tourismus"
- coaching "Lehre statt Leere"
- a special rate card "Glücksbringer-Lehrlingscard

- the initiative "internship abroad for tourism trainees"
- a teacher's guide "Tourismus in Österreich"
- the new apprenticeship job "Hotel Salesman /-woman" (BMWFV, 2016)

The overall aim of these activities is to inform young people about their job possibilities and working conditions in tourism (BMWFV, 2016). Taking into account all these efforts and the ongoing decline of traineeships in tourism, several questions arise. From today's point of view, the aim of the author's dissertation is to answer these questions, test developed hypotheses and give useful suggestions to deal with the main research problem: the unattractiveness of working in tourism. Results will be both discussed with policy-makers in charge of economic and tourism development and contribute to further research and a deeper understanding of how tourism as a working is being perceived by employees.

2 METHODOLOGY

The aim of this research paper is to raise questions, present the proposed methodology to address them and to discuss hypotheses. After intensive literature research, hypotheses will be developed followed by qualitative semi-structured interviews with trainees and parents and focus groups with pupils. Those will build the basis for the questionnaires for quantitative research purpose.

The qualitative research will be done amongst different target groups (G), which are separated into people from an area with a strong tourism sector (G_t) and people from a non-tourism region (G_{nt}). There will be focus groups with the pupils which include six to ten pupils. At least three semi-structured interviews will be done by each cohort, so a total of 24 interviews will be achieved

Table 1: Qualitative Research

Tourism region	Non-tourism region	Method
$G1_t$: Pupils aged 14, before their job decision	$G1_{nt}$: Pupils aged 14, before their job decision	Focus groups
$G2_t$: Trainees, working in tourism	$G2_{nt}$: Trainees, working in tourism	Semi-structured interviews
$G3_t$: Trainees, not working in tourism	$G3_{nt}$: Trainees, not working in tourism	Semi-structured interviews
$G4_t$: Parents who work in tourism and have children aged 14 – 16	$G4_{nt}$: Parents who work in tourism and have children aged 14 – 16	Semi-structured interviews
$G5_t$: Parents who do not work in tourism and have children aged 14 – 16	$G5_{nt}$: Parents who do not work in tourism and have children aged 14 – 16	Semi-structured interviews

These results will be the basis for the quantitative research which will consist of a survey. After testing and rearranging the questionnaires, they will be distributed digitally and in printed form amongst all five of the above-named groups ($G1_t$ to $G5_t$ and $G1_{nt}$ to $G5_{nt}$). Processed via SPSS and statistically analysed, all the data gathered should lead to at least three to five scientifically relevant results in general and specifically for the Austrian labour market.

In correlation to the literature findings there will be a certain focus on comparing the results within the tourism region and the non-touristic region. In addition, international tourism

labour markets will be analysed and compared to the conclusions from this research. This will broaden the importance and relevance of the author's work.

3 (EXPECTED) RESULTS

As this paper is written with a view to raise questions and hypotheses for the author's dissertation, this presentation will consist of a first attempt at formulating the first sections of the dissertation. In keeping with the problem statement, the following questions should be answered:

- Have the actions undertaken by the government been successful, and did they retard the decline of traineeships in tourism?
- What are the influencing factors concerning the attractiveness of tourism as a workplace?
- Which dynamics and circumstances influence the job decisions of young people in general?
- Is there a difference of influencing factors in tourism regions compared to non-touristic areas?
- How attractive is it for young people to work in tourism?
- How do workplace expectations of the generations Z and Y influence future labour markets in tourism?

In this early stage of research, the following hypotheses were developed and focus on the linkage of tourism-related job choices of young people within the age of 14 to 16 and its relation to parents' attitude towards working in tourism:

- Austrian teenagers are influenced by their parents when they decide whether to attend an occupational training in general and especially tourism.
- Austrian teenagers are more likely to work in tourism as an apprentice when there is somebody they know who is also working in tourism.
- Austrian teenagers are more likely to work in tourism as an apprentice if they are living in a tourism region, even if they don't see personal self-fulfilment in working in tourism in future.
- Parents don't have a clear vision of tourism as a workplace and so they discourage their children from taking up an apprenticeship in tourism.
- Youths don't have a clear vision of tourism as a workplace and so they are not willing to begin an apprenticeship in tourism.

4 CONCLUSION

Following the current media discussions about the existing and future skills shortage in tourism, which mainly take place in newspapers and industry magazines, it is critical to make working in tourism attractive again. This development in many cases starts at the age of 14, when pupils decide about their educational and career paths. The author's dissertation will contribute by showing the influencing factors on tourism-related job decisions. This could lead to a better understanding of how best to promote traineeships in general but especially in tourism. Labour and business organisations could use the results to rework existing guidelines or develop new ones targeting parents and educators. An essential contribution will thus be made to containing the skills-shortage in tourism both in Austria and also internationally.

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'Smart' Visitor Mobility Management in the Tourist-Historic City

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Abstract

The multi-disciplinary study tries to establish interrelations between online mobile technology used for heritage interpretation and visitor mobility behaviour, exploring the implications that the changed behaviour patterns have for applied visitor management in UNESCO World Heritage listed historic city centres. Ubiquitous online mobile technology disperses delimitations between activities, time and space which affects and fundamentally changes everyday life including touristic utilized spaces and activities. In this 'liquid modernity', tourism is perceived as an essential form of mobility, increasingly changing under the influence of online mobile technologies. With this changing landscape of both, tourism and online mobile technology, interpretation of space, communication of information and the ensuing movement within a destination have to be amended accordingly. Tourism is often considered as one of the few options for economic vitality in historic cities. However, there is a fine line between tourism being an added value and support to conservation, and tourism becoming the reason for conservation. This study scrutinizes prevailing visitor mobility management strategies in historic cities in the context of changing visitor movement triggered by the increasing influence of online mobile media. For this purpose the technology awareness and acceptance of destination management organisations and the utilization of interpretive online mobile media is explored by conducting an online survey in 127 UNESCO World Heritage historic city centres, followed by an in-depth analysis in selected study areas of the compatibility of currently applied visitor mobility management strategies with prevailing behaviour of 'connected' visitors using sentiment analysis on data generated from social media mining.

Keywords: Visitor Management; Technology Acceptance; GIS; Online Mobile Technology, ICT; Historic Cities

1 AIM

The overall aim of this study is to identify and understand the actual and potential influence of mobile technologies upon visitor mobility behaviour within historic cities, and to evaluate the implications for, and effectiveness of, prevalent visitor management strategies on the case of UNESCO World Heritage listed historic cities.

From this objective three sub-aims derive: (1) The examination of the prevailing technology acceptance and actual technology usage of Destination Management Organisations and (2) the identification and understanding of the actual and potential influence of mobile technologies upon visitor mobility behaviour within the tourist-historic city which provide the basis for (3) the evaluation of the implications for, and effectiveness of, prevalent visitor management strategies with focus on online mobile technology integration and utilization.

2 BACKGROUND

The 'historic city' is a contemporary concept shaped by the urban form and fabric of the past, and fed by intangible notions of heritage (Mitsche et al., 2013) that are increasingly imparted by technocentric communication methods, making the 'past' not only more accessible, but also more vulnerable than ever before (Lowenthal and Till, 1997). Many cities and towns utilise and even exploit heritage in some form, although the physical components of heritage cannot be expanded easily and are expensive to safeguard and renew. Tourism contributes to the economic vitality of historic cities, however, the touristic utilization of historic built environments commonly entails a deep transformation of social, environmental and physical (urban) structures (Barrera Fernández, 2016), requiring effective management to navigate the

"delicate balance between tourism being a support to conservation and tourism becoming the reason for conservation." (Orbasli, 2000, p. 13).

As a communication process, heritage interpretation is designed to reveal and convey meanings and relationships of cultural and natural heritage to audiences, and is an important tool for effective destination management. However, due to advances in computing capabilities and the rapid uptake of ubiquitous mobile technology, Information Communication Technologies (ICTs) became a pivotal tool to effectively interpret environments and increasingly calls the effectiveness and relevance of classic interpretative methods into question.

In 'The Tourist Gaze', Urry (2002) expressed the dynamics of the tourist experience, emphasising changes in the organisation of travel, including innovation in communications technology, development of travel infrastructure, transformation of the economy and the changing taste of travellers. In light of these changes, a 'New Mobility Paradigm' has emerged, redefining tourism as a temporary form of mobility, in essence, conceptually analogous in scope and meaning to other forms of movement. This new paradigm opens up new possibilities for more effective analysis and management of mobilities and immobilities within tourist-historic cities, including the reconsideration of the concept of the 'traveller'. Coles et al. (2004) promote the need to understand the behaviour of the individual and not simply focus on the purpose-driven tourist. However, ubiquitous online mobile technology increasingly blurs the boundaries between activities, time and space as individuals negotiate their day-to-day mobility with increasing fluidity and make ad-hoc decisions on the go (Dickinson et al., 2012), creating unprecedented effects and constraints on tangible and intangible components of the tourist-historic city.

This growing 'liquid modernity' (Bauman, 2000) has been accelerated through the advent of ubiquitous mobile technology, comprising 1.8 billion global smartphone users in 2015 with a forecast to reach 2.7 billion by 2019 (Statista, 2016). In 2015, globally 1.2 billion people travelled (UNWTO, 2016) and 1.8 billion travellers are to be expected by 2030 (UNWTO, 2011), whereas 42% of all travellers used smartphones to plan their trip and 67% used smartphones at the destination to find their way around (Carter, 2015). Considering these statistics the imperative to investigate and understand the impact of mobile technology upon visitor behaviour is apparent, particularly within the fragile and unique environments of historic cities.

UNESCO (2015) considers mobile technology as both a threat as well as an opportunity for historic sites, encouraging site management organisations to fundamentally reconsider their strategies and incorporate and adapt to new technologies. However, to be able to do this effectively, behavioural changes of 'connected' visitors have to be first identified and understood. Recent research has utilized location sensing and tracking to generate spatio-temporal data to understand different aspects of mobility and travel (Moussouri and Roussos, 2015; Al-Subhi, Bell and Lashmar, 2015). However, to gain a richer understanding of the users' experience of and relation to the historic built environment, this research proposes the use of social media data mining (Chua et al., 2016), combined with targeted ethnographic mobility studies to explore the effects of mobile technology on the movement and experience of visitors in historic cities, and to examine the implications for visitor management strategies.

3 METHODOLOGY

The methodological design proposes a sequential multi-stage, mixed method approach. The first stage focusses on the supply side of a destination. An online survey is sent out to (1) identify the technology awareness and acceptance of Destination Management Organisations (DMOs) as well as the technology integration into policies and the actual use of online mobile media. The results of this survey will also provide the basis to (2) identify three suitable study areas for in-depth investigations in the subsequent stages. The in-depth analysis will use sentiment mining techniques to extract and illustrate technology influenced movement and behaviour of the demand side (visitors) on an intra-destination level. Geographic Information Systems (GIS) will be used to overlay and compare mined data to applied visitor management strategies and techniques at the destination with the purpose to reveal compliance or anomalies between the intended visitor management activities and the actual, technology influenced visitor behaviour.In case of severe deviations between management intention and visitor behaviour it is envisaged to conduct an ensuing ethnographic study at relevant sites for a better understanding and identification of potential causes.

3.1 Technology Diffusion in Visitor Management

A methodological framework has been developed to be able to identify technology awareness and acceptance on a destination management level as well as the actual use of technology in terms of policy integration and actual utilization. The methodological framework sequentially combines awareness models (Markopoulos, Ruyter and Mackay, 2009), technology acceptance models (Taylor and Todd, 1995) and use theories (Venkatesh et al., 2003).

The focus of this study is the identification of technological awareness and acceptance of destination management organisations (DMOs) in terms of intra-destination visitor management and interpretive ICT strategies, to understand the prevalent utilization, application and incorporation of mobile technologies for on-site visitor mobility management as well as heritage interpretation. For this purpose, online questionnaires based on the developed methodological framework will be designed and distributed to 127 DMOs covering 139 listed UNESCO WHS in Europe and North America.

Based on the findings of the online survey it is envisaged to select three relevant study areas for the in-depth examination of online mobile diffused visitor behaviour within the managed destination.

3.2 Technologically Influenced Visitor Mobility Behaviour

The aim of this stage is (1) to identify spatio-temporal visitor behaviour with focus on ‘sojourn areas’ at the destination. It is anticipated to generate large data through social media data mining by using R as coding language to access social media platform APIs (Application Programming Interfaces) and apply text mining techniques such as sentiment analysis and topic modelling for content analysis.

Subsequently, (2) GIS (Geographical Information System) will be used to identify compliances and/or deviations between applied visitor management strategies, interpretive methods and activities used at the destination and the previously user-generated spatio-temporal mobility behaviour data extracted from social networks.

Complementing the quantitative data generation, the last stage proposes an ethnographic investigation to further discuss the identified deviations and anomalies between actual technology-influenced visitor behaviour and applied visitor management strategies. The aim is to understand and describe implications that the 'digital panopticon' (Ahas et al., 2014) created by the ubiquitous availability of mobile technology has on visitors' spatio-temporal movement behaviour (Büscher and Urry, 2009). It is envisaged to perform covert or participatory observations, such as 'shadowing' (Bærenholdt et al., 2005) or apply 'participation-while-interviewing' techniques (Kusenbach, 2003), of visitors in the selected areas, the final choice of the appropriate technique is based on the results of the preceding data generation. The core purpose of the ethnographic study is an in-depth investigation of the immediate effects social media can have on user behaviour, in this case focusing on the influence on spatio-temporal decision-making processes and consequently movement behaviour of users in historic cities when using online mobile technology to explore the destination.

4 EXPECTED RESULTS

Based on the overall hypothesis of the study it is expected to (1) give an insight on the prevailing technology acceptance and usage among DMOs as well as (2) identify deviations or consistencies among applied visitor management strategies at the destination and actual behaviour of visitors using online mobile technology applications and devices on-site.

The first phase of data generation is envisaged to start in April 2017, leading to first results by May 2017.

5 CONCLUSION

This study will provide foundational insights into conceptual and empirical discrepancies between provider and user of interpretive online mobile technologies in touristic urban environments. Prevailing paradigms of space use and mobility are scrutinized based on the proposed behavioural changes of the ever-growing number of online mobile media users.

These findings provide the potential to optimise destination management, tackle touristic constrains on sites as well as holistically yield touristic impacts on a sustainable basis.

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