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Preface

The advent of Information and communication technology (ICT) has had a paramount impact on tourism. The effects of this revolution continue to change the nature of contemporary tourism on a day-to-day base. The globalization of information, open innovation, better access, collaboration in a generation of information and technological convergence, have all contributed to the design of a new scientific paradigm.

Thanks to our passion for research and to the continuous advancements in the technological ecosystem as well as the possibility of better understanding human activity and behavior we are on the threshold of a new era of the social science of tourism.

This new social and technological paradigm affects tourism and human mobility in a way that gives the research process unheard-of possibilities. The current level of technological development allows for the construction of objects that are smaller, more intelligent and embedded in the environment and even wearable.

These objects, which record and learn our habits are connected to the Internet and they have computing capabilities. They can also be interconnected and generate large quantities of information to benefit the environment in which they are located as well as the travellers that possess them. This gives rise to a new world of interconnected personal machines.

This new world involves a convergence among what is physical, what is social and what is digital. Within this context, research assumes the principal role to guide evolution, transferring knowledge to the industry. Relevant academic research is more necessary than ever before in order to explore how ICT in tourism can contribute to face the challenges of the travel and tourism industries of the next 20 years.

This electronic volume collects the contributions presented at the ENTER2014 PhD Workshop. The published PhD proposals features in this volume have been selected out of a large number of high quality submissions covering a wide spectrum of topics related to ICT and travel, hospitality and tourism. The quality of the PhD research proposals presented in these proceedings evidences the

existence of a critical mass of young researchers that will contribute to increase the existing body of knowledge in the field of ICT and Tourism.

We hope you will enjoy reading this volume and that the proposals will provide you useful food for thought for your research.

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Location Based Transmedia Storytelling: Enhancing the Tourism Experience

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Abstract

Consumer habits have radically changed with new technology, namely the travel consumption habits and the search of information. Storytelling is an intrinsic part of human existence. It allows us to make sense of our environment. It also enables us to pass on information, culture and values. Native transmedia storytelling projects are a natural evolution from the traditional story projects and have been applied successfully in industries like entertainment and marketing. However the results of this type of projects remains to be studied within the tourism industry. The overall goal of this research is to understand the impact of the use of transmedia storytelling techniques in the tourism sector worldwide, particularly in Porto's tourism industry and at the same time to develop a technological product that can be adapted to tourism in other parts of the world.

Problem Definition

The tourist's behaviour has suffered a big transformation. Although transmedia storytelling techniques are considered to be at the heart of future communications, the study of these practices within tourism is practically non-existent. Therefore to study their impact can prove to be extremely relevant for the future of tourism communication and marketing strategies.

Literature Review

Storytelling is central to the human condition (Gottschall, 2012:xiv). Stories are how humans make sense of events and share information with others. They are the most powerful form of communication carrying not only information but also emotion (Rose, 2011:1). Recently storytelling has been gaining attention in the

tourism industry (Mossberg et al, 2010).

The introduction of new technologies has created a new type of consumer behaviour (Red Bee, 2011), changing the way tourists search and find information about their destinations (Gretzel et al, 2012). Google described this new type of consumers as multi-screener since they spend most of their media time in front of a screen such as a computer, a smartphone, a tablet or a TV (Google, 2012).

Transmedia storytelling projects can result in a “consumer desire to share the experience and substantially increased revenue” (Gomez, 2010). These two results are in line with the tourism industry objectives.

Conceptual Development

In this research we aim to understand the impact of the use of location based transmedia storytelling techniques in tourism, particularly the advantages, disadvantages and best practices. We’ll be looking at questions such as:

- Can transmedia storytelling transform touristic visits into more engaging experiences?
- How do tourists behave across the different platforms?
- What content do tourists create, share and how frequently?
- Which are the best analytic tools?

Proposed Methodology

In 2012, we proposed the term location based transmedia storytelling has “the art of telling stories based on a specific location through multiple-media platforms with audience participation, where each storyline makes a valuable and distinctive contribution to the story (Ferreira et al, 2012).

To examine the location based transmedia storytelling practices applied to tourism, we have divided our mixed data collection methods in three stages as depicted in the figure bellow.

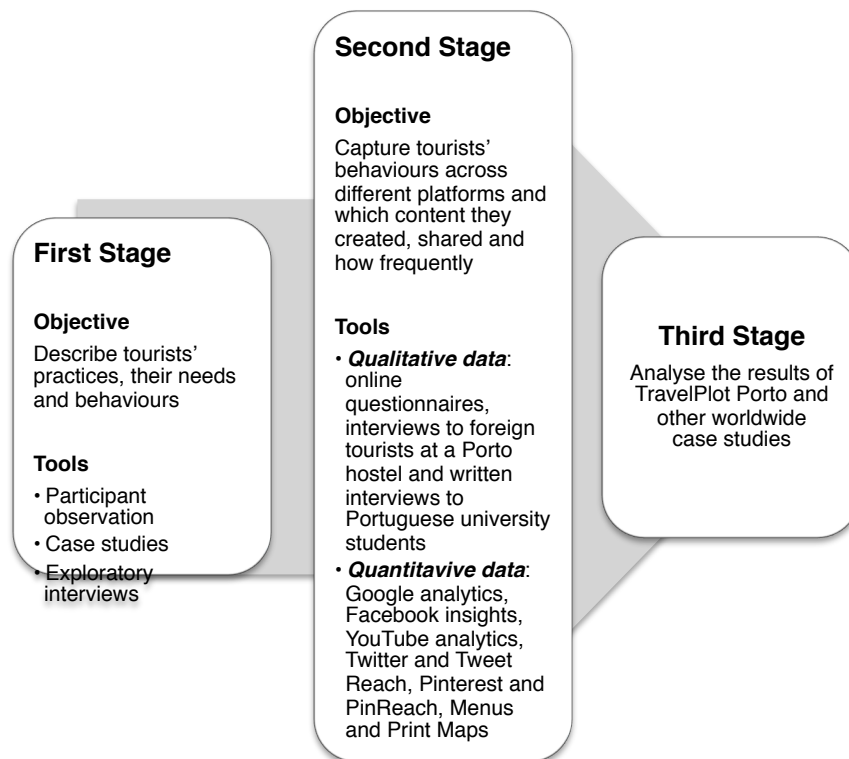


Fig. 1. Data collection stages and tools

The data gathered from the first stage of data collection offered the basis for the construction of a pilot location based transmedia storytelling project – TravelPlot Porto.



Fig. 2. TravelPlot Porto Poster

TravelPlot Porto is a transmedia storytelling tour guide. It was launched in Porto, on June 2012. For three months, tourists had the opportunity to join Porto's

treasure hunt. The story was divided into nine historical chapters and forty-two locations. Different pieces of the story could be found in the projects different platforms: iPhone/Android app, website, map, live events (gastronomy, wine tasting, Douro cruise and souvenirs) and social networks (Twitter, Pinterest, YouTube and Facebook).

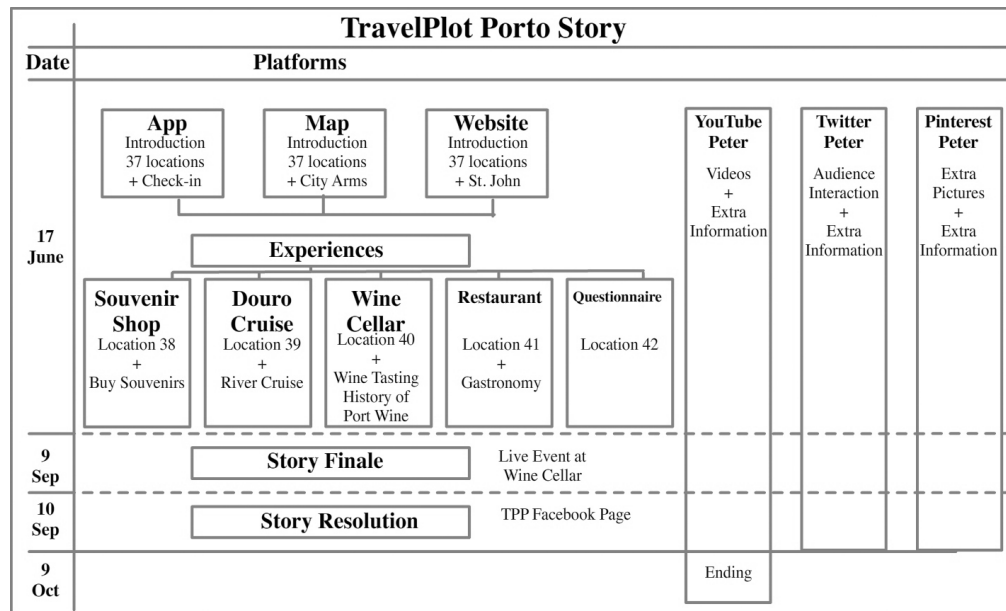


Fig. 3. TravelPlot Porto story architecture, different platforms and their release date

Besides examining TravelPlot Porto data, we will analyse particular case studies, namely their genre, story, platforms used, duration of the project, audience engagement and overall results.

Anticipated Results

Currently we are at the third stage of the mixed data collection.

This research expects to contribute to the research fields of locative media as well as content marketing. It also aims to provide insights into the emerging theoretical understanding of location based transmedia storytelling techniques, which can

support new initiatives in this field of research and add to our understanding of why storytelling will be commercially important to tourism.

It also intends to provide the industry with some of the best practices examples of location based transmedia storytelling products as well as a technological product that can be adapted to tourism in other parts of the world.

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Tourism Marketing Communications on a Chinese Social Media Platform

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Social media have become important communicative platforms for tourism marketers but it is not clear if and how the communicative language of marketer-to-consumer is different from consumer-to-consumer. Given the enormous growth of both tourism and social media in China, this paper focuses on patterns in language use by the Chinese tourism marketers on Weibo. Using systemic semiotic approach, it selects and investigates two corpora of communication on Weibo – tourism to consumer and consumer to consumer. This study expects to provide the firm understanding and categorize the patterns in the language used by Chinese social media marketers so that differences to consumer language can be identified and tourism marketers can learn about language conventions apparent in these social media.

Key words: social media marketing; communicative language; Weibo; conversational routines; tourism

Introduction

Tourism is an information intensive industry (Cox et al. 2009). Organizations rely on the communication with tourists through various channels to market their products and build customer relationships (Poon, 1993). Indeed, social media have grown to be one of the most effective means for tourists to seek information and share travelling experiences (Cox et al. 2009; Gretzel 2006; Yoo & Gretzel 2008). Given the prevalence of social media use among tourists, social media become indispensable platforms for tourism marketers (Pantelidis, 2010; Chan & Denizci, 2011; Huang, 2011; Munar, 2010; Xiang & Gretzel 2010). Within tourism marketing, several studies have looked at the use of social media as communicative tools for promoting products or services (Kasavana, Nusair & Teodosic, 2010; Lanz, Fischhof & Lee, 2010), creating interactive conversations and building customer relationships (Pantelidis, 2010; Schmallegger & Carson, 2008). Furthermore, early research has suggested that people use a surprisingly large number of different words to describe the same concept, which makes it difficult to accommodate these varied representations in a system (Furnas et al. 1987). These studies apparently indicate that the language used by marketers and tourism is more than a word. Rather, the semantic content and linguistic style play

substantially important role in increasing conversion rate, indentifying and promoting the most influential product reviews, and stimulating consumers to write powerful reviews (Luewig et al. 2013). Unfortunately, what is missing from the tourism literature is a firm understanding of the language used by marketers as well as by consumers on social media platforms.

When discussing the importance of social media in tourism, China cannot be ignored. China's domestic tourism as well as outbound tourism has been experiencing a rapid growth. According to the National Bureau of Statistics of China (2013), by the end of 2012, the number of domestic tourists reached 2.96 billion, up 12.1% over the previous year. As for outbound travelling, in 2012, Chinese travelers spent \$102 billion on overseas travel, more than tourists from any other country (UN World Travel organization, 2013). While preparing travel plans, an increasing number of Chinese tourists rely on social media platforms (Nelson, 2013). By the end of 2012, Weibo gained over 500 million users, up by 50% compared to the same period the previous year (China Internet Watch, 2012). Weibo's great market penetration and high growth suggest tourism marketers need to understand how to build effective and sustainable communications on Chinese social media platform. Against this backdrop, the goal of this proposed research is to understand and categorize patterns in the language used by Chinese social media marketers so that differences to consumer language can be identified and tourism marketers can learn about language conventions apparent in these social media.

Problem definition

Previous studies suggest that a study of convention of communication requires to look at formulaic expressions or conversational routines (Aijmer, 1996). A great deal of attention has been paid to formulaic expressions in language acquisition and language development. The one focusing on marketing communication in tourism remains nascent area. Moreover, previous studies have discussed conventional routines in terms of both spoken and written language. Online communications on social media show that the boundaries between spoken and written interaction are getting blurred (Herring, 1996), making it difficult to

analyze in terms of spoken and writing (Aijmer & Stenstrom, 2005). Lack of simultaneous feedback, missing reaction signals and multiple conversations suggest the ‘electronic revolution’ will bring about a ‘linguistic revolution’ (Crystal, 2001). To deal with the foregoing research problems, the following research questions are identified.

Q1: What are the linguistic patterns of marketing communication on social media that are distinct from those have been established for conventional media?

Q2: What are the characteristics of linguistic patterns of marketing communication on social media?

Q3: Are linguistic patterns of marketer-to-consumer communication distinctively different from consumer-to-consumer communication on social media?

Literature review

3.1 Social media marketing

Social media marketing – using a variety of social media channels to promote a company and its products (Barefoot & Zhao, 2010) – has become indispensable to an organization’s marketing plan (Mangold & Faulds, 2009). As Yoo and Gretzel (2010) pointed out, it spans all aspects of marketing, including marketing mix (4Ps), customer relationships, marketing research and performance measurement. Engagement with consumers on social media is driven by word of mouth among consumers, in an electronically facilitated extension of traditional word of mouth (Mangold & Faulds, 2009). Further, consumers not only have greater access to information and greater command over information consumption than ever before, but can themselves actively create marketing content (Evans, 2008). Marketer cannot dictate communication on social media; instead, they have to engage consumers’ interest and participation. Successful marketing in this new conversation space calls for innovative strategies. An engaging conversation on social media requires marketers to understand who is talking to whom – not only markers to consumers, but consumers to each other – and what they are talking about (Gretzel & Yoo, 2013). Though extant literature has discussed the importance and differences of social media marketing, very few marketers have a clear idea how to engage consumers and influence conversations on social media

(Divol, Edel & Sarrazin, 2012). These gaps suggest that marketing literature needs to provide fundamental knowledge about social media marketing, which can serve as guidance for marketers.

3.2 Conversations social media marketing

Description of posts and comments on social media shows that it is a form of 'conversational exchange' (Honeycutt & Herring, 2009). Individuals can witness diverse conversations (Yardi & Boyd, 2010), and they may be clearly singled out and engaged in a conversation (Grosbeck & Holotescu, 2009). This interpersonal conversations afforded by social media has placed new and interesting semiotic pressure on language, and most studies do not offer a theoretical basis for the description of social media communication as a form of conversation (Zappavigna, 2012). From marketing perspective, relevant research in analysing conversations has been focusing on macro-level analysis, such as online review, information search and online forum engagement (Fayard & DeSanctis, 2010; Quenti, Ravid & Rafaeli, 2004; Ludwig et al. 2013; Pan & Fesenmaier, 2006). Ludwig et al. (2013) employ text mining to extract changes in affective content and linguistic style properties of customer book reviews on Amazon.com, indicating the essential role of language in marketer-to-consumer communications. Fayard and DeSanctis (2010) use Wittgenstein's concept of language games to examine how participants of two online forums construct collective identity and culture through their discursive practices, which highlight the consumer-to-consumer communication. In tourism, Pan and Fesenmaier (2006) compared Semantic Models of Tourists and Information Space. Findings show that the languages used by consumers differ substantially from those found on websites employed for their vacation planning.

3.3 Conversational routines on social media

Conversational routines (CRs) - patterned phrases which are frequently used in a specific situation and with certain participants (Aijmer, 1996) - have been studied on traditional media. The use of social media indicates that communication patterns have shifted from primarily traditional media to significant use of online computer-mediated communication (Zappavigna, 2012). Posts, comments and status update may be used like a real-time conversation, a question inviting a

response or a simply statement to keep individual's network alive (Crawford, 2010). The role of social media profiles as an ongoing conversation in multiple modalities (Boyd & Heer, 2006), which can be generated and influenced by unfolding linguistic patterns. As opposed to CRs that have established on traditional media, a conversation on social media marketing has a number of typical features: (1) it is interactive; (2) it is collaborative; (3) it focuses on written context; (4) more participants (including marketers and consumers) can involve in the same conversation and (5) it is a continuous process. To date, the field of research has primarily studied the communication patterns on social media from computational linguistic perspective. In particular, machine learning has been used for stylistic text classification to distinguish texts on social media. This automated analysis of conversations on social media poses difficulties for human linguistics (Zappavigna, 2012). Given the complexity of conversations on social media, a fine-grained study is needed to look at their specific communication patterns.

Conceptual framework

This study will adopt Systemic Functional Linguistics (SFL). SFL is described as a functional-semantic approach to language which investigates two essential issues: 1, how people use language in a variety of context; 2, how language is structured for use as a semiotic system (Halliday, 1994). Slade and Eggins (2004) have pointed out two advantages of SFL for conversational analysis. (1) SFL provides researchers an integrated and comprehensive model of language which allows language patterns to be described in different degree of detail. (2) SFL offers a theory to study how people use language in their social life. More specifically, conversations can be analysed as involving different linguistic patterns which underline interpersonal relations. It is fairly to say that these advantages of SFL respond to the features of marketing language on social media: (1) it addresses social dimension; (2) it highlights speech roles, contact and sheerness between interactants.

Methodology

This study will use speech function approach to analyse the communication patterns on social media. Conversations between marketers and consumers on

social media entail the nature of being interactive, collaborative and continuous. The speech function method is a subsystem within SFL and it deals with the grammar of interaction from a semantic perspective (Halliday, 1994). Speech function approach is a comprehensive method to study conversation, and it provides evidence to look at how language has been used. It stresses all kind of conversations must entail certain moves, which are statement, question, offer and command. Further, speech role and commodity choice are focal points of speech function theory. Speech role consists of giving (e.g. would you like borrow my book?) and demanding (e.g. can I borrow your book?). Commodity choice comprises exchanging information. For instance, “who cleaned the house?” “Tom did”. It also includes exchanging goods or services. For example, “can I borrow your computer?” “of course, here you are”. The use speech function approach allows this study to identify and categorize patterns in the language used by Chinese social media marketers. In terms of sample, this study will choose two corpora, business to consumer and consumer to consumer communications on Weibo – the largest social media platform in China.

Expected outcomes, contributions and implications

This study is expected to identify the communication patterns of marker-to-consumer and consumer-to-consumer. It is believed that the results will help tourism marketers to learn about language conventions apparent in Chinese social media landscape. Furthermore, this study may make following contributions: 1, shed light on the increased e-presence in Chinese internet language; 2, provide tourism marketers a firm understanding regarding the social media landscape in China; 3, advance the theory of Systemic Functional Linguistics or SFL; 4, adding knowledge of methodological approach in studying pragmatic linguistics on social media platform. From industrial perspective, this study will be able to provide insights about how to fully leverage language and culture to expend tourism market overseas.

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Tourists Co-creation Experiences Onsite-Enabled by Mobile Devices

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1. Problem Statement

Tourists experience has been playing a vital role for the tourism product thereby requiring practitioners to focus on designing and staging of memorable experiences (Imdorf, 2013). Being better educated, as well as enjoying higher levels of disposable income, tourists tend to look for more sophisticated sites and places of interest. The reason is that the tourists' demand for experiences is highly increasing (Pine and Gilmore, 1999). Moreover, Prahalad & Ramaswamy (2004), cited that tourist experience is becoming a very complex phenomenon in the tourism industry because tourists are striving to be part of the experience creation. And Gretzel et al., 2006, Andersson (2007), added that tourists are taking active part in the experience creation as "prosumers". While tourists are co-creating their own experiences, Lis (2008), noted that information and communication technologies "ICT's" are mediating tourists experiences. And according to Clemens (2012), the use of technologies such as mobile devices is rapidly increasing. Hence, the application of social Local Mobile "SoLoMo" and the possibility of media convergence through mobile technologies have facilitated tourists in bringing their own devices onsite (Clemens, 2012). Moreover, Gartner emerging technologies Hype Cycle for 2012 depicts that bring your own device "BYOD" will reach its plateau within two to five years.

Considering that co-creation of experience is the main builder for value creation and coupled with the fact that mobile devices are widely used by tourists onsite; there is limited research on co-creation tourist experience with mobile technology and mobile devices. These have necessitated the need to contribute to the literature of tourist co-creation experiences with technology. Therefore, this study explores how the application of mobile devices can enable the co-creation of tourist experiences on site.

2. Literature Review

Over the last decades Tourists experience have gained much attention, as the main focus for creating the value of the tourism products. The reason is based on the notion that the tourism product is intangible, perishable, and seasonal (St. Hilaire, 2009). The idea is that the tourism product is intangible; as such, it is the experience that the tourists gain during consumption (Raakish, 2009). Hence, the designing and staging of memorable experiences is of high importance (Imdorf, 2013). As the world continues to change rapidly, the tourists' demands become more sophisticated and complex. And this is directing competitive tension on the tourism industry and thereby advocating deviation from tourism facility orientation to the customization of experiences (Knutson, Beck, Kim & Cha, 2006). Another major challenge facing tourism service providers is that tourists these days seek to be involved in the value chain to create their own experiences (Prahalad & Ramaswamy, 2004). This seems to agree with Pine and Gilmore (1999), who coined the concept of the experience economy which propounded that experience creation, is the cardinal point of any business. The reason is because a simple product and service offers are interchanging. For this reason, it is crucial for companies to deliver experiences that would unveil unique emotions and create retentive memories to consumers (Pine & Gilmore, 1999). Furthermore, it should be noted that tourists' experiences are socially constructed in the tourists' interactions and experiences. Moreover, experiences are associated with different social and environmental components of the visited destination (Lis et. al, 2008). Adding to that, Neuhofer, Buhalis, and Ladkin (2012), argue that the creation of experiences is shifting from the suppliers' side, to involve the consumers. As a result, transforming how it is being created in a destination. This view coincide with Morgan et al., (2010), which depicts that consumers no longer purchase services but rather seek experiences gained through the consumption of products and services. Tourists are co-creating their own experiences, therefore the outcome for not recognizing this shift can showcase a great impact on the tourism service providers (Neuhofer, Buhalis, and Ladkin, 2013).

2.1. Co-creation Tourist Experience

According to Prahalad & Ramaswamy (2004), co-creation is a “form of market or business strategy that emphasizes the generation and ongoing realization of mutual firm-customer value”. Whereas Neuhofer, Buhalis, & Ladkin (2013), state that co-creation tourist experience are “experiences that are not only passively staged but rather actively shaped and created by the tourist consumer in conjunction with the company”. Moreover, Copenhagen Co-creation Ltd (2009), claimed co-creation as a process that changes the game of innovation from designing for people to designing with people”. Co-creation experiences refer to an inclination involving tourists to develop products and service. This thereby creates new remarkable and beneficiary experience to them. The co-creation experience is “the next practice in value creation” (Prahalad and Ramaswamy, 2004). It increases value to the overall experience of tourists through the acceleration of tourist involvement from the pre-travel, onsite, as well as the post-travel phases and it can be extended to the virtual world (Neuhofer, Buhalis, & Ladkin, 2013). The co-creation process begins from the inspiration or the heart desire of individuals. What the individual would like to experience the most. The co-creation process connects closely with active participation; the inner alignment of an individual with positive motive to co-create what he or she wants (The Travel Soul Therapy, 2013). However, the experience environment should be of evoking interest so that consumers can take on a life of active participation. As a result, become directly involved in the co-creation of their individual experiences (Binkhorst, 2006). Meanwhile Buhalis and Law (2008), cited that, the rapid growth of information and communication technologies ‘ICT’ facilitates the tourists with more valuable information; and enhances tourists’ experiences (Neuhofer and Buhalis, 2012). Therefore, the co-creation environment must be admissible to the potentials enabled by emerging information and communication technologies (Van Limburg, 2012).

2.2. Mobile Technology and Tourism

Gretzel and Jamal (2009), pointed out that in addition to occupying the role of functional devices, ICT’s have become essential features of the creative lifestyle and experiences of contemporary tourist consumers on site. Technologies such as

mobile devices, are seen these days as transportable smart computers, and have become part of our life styles (Wang et al, 2012). Conceding to this fact, Clemens (2012), cited that the application of social local mobile (SoLoMo) has triggered the practice of tourists bringing own mobile devices onsite and engaging in moblogging. Furthermore, Neuhofer (2013), notes that, the key trend indicates that technology co-creates and enhances tourist's experiences. And in the very near future these mobile devices technology will create a whole range of new tourists' experiences (Gretzel and Jamal 2009). Although other researchers have published papers on co-creation tourists experiences as well as technology enhanced experiences in the past years, (Binkhorst, 2006; and Neuhofer, 2013), advocates that there is no extensive literature in this area of research. This paper proposes a conceptual structure shown in fig 1, to understand how mobile devices can co-create tourists experiences on site, and the extent of co-creation. The purpose of this study therefore, is to explore how the application of mobile devices can enable the co-creation of tourist experiences on site.

3. Conceptual Development

Building on the literature review on tourists experience and technology in tourism, this study is set into the context of co-creation tourist's experience. It is focus on understanding how tourists engage with their mobile devices to co-create their experiences onsite. The study strive to contribute to the literature of co-creation tourists' experiences on one hand, and to provide a better understanding for tourism professionals on how to strategically involve tourists in the value creation onsite, through the application of mobile devices. Considering that limited research exists on co-creation tourist experience with mobile technology and mobile devices, the proposed model draws together the existing literature from tourists' experiences and the success of mobile devices usage onsite. Based on previous research, it can be argued that technology endures and augments tourists' experiences (Neuhofer and Buhalis, 2012). The reason is that the convergence of social local and mobile technologies facilitates consumption of media content in several locations at whatever chosen time. And the interaction between tourists' onsite and their mobile devices is the center point of experience co-creation. Therefore as Clemens (2012) cited, it may be reasonable to contend

that location-based engagement enables active interactions and creates value to tourists' onsite.

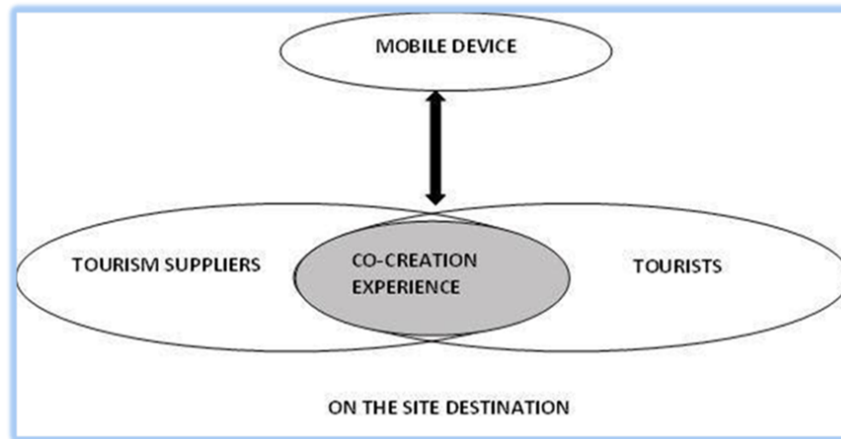


Fig. 1: Conceptual model Mobile enabled co-creations Tourism Experiences
Source: Adapted from Prahalad & Ramaswamy (2004).

4. Proposed Methodology

In order to explore how the application of mobile devices can enable the co-creation of tourists' experiences on site, a quantitative approach is adopted. The first step of this study was the review of extensive literature on the topic of co-creation tourists' experience, the impact of mobile device technologies in tourism and it constructed experiences. Then the functionality of mobile devices and the activities performed onsite with these devices was examined. Based on the results of the literature review, a survey will be employed in order to evaluate and measure the level of experience co-creation enabled by mobile devices. After that a focus group interview will also be applied in order to validate the findings. Prior to administering a mass survey, a pilot test will be carried out to test the validity and reliability of measurement instrument. In order to avoid selection bias some screening questions will be adopted to ensure the eligibility of the respondents:

where is your country or city of residence? For how long are you visiting? And did you come with your own mobile device?

5. Anticipated Results

The expected results of this study is that the posited manner and level in which mobile devices enable the co-creation of tourists' experiences onsite will be confirmed. Furthermore, the specific activities that contribute to tourists' perceived value of co-creation experience onsite, through the applications of mobile devices will also be outlined. Based on the findings, tourism practitioners will be alert about various mobile apps that they should emphasis in their onsite mobile application or strategies.

On the other hand, it is expected that the outcome of this study will also contribute to the literature on tourists co-creation experiences enabled through the application of mobile device technology. It is expected that both academicians and practitioners in tourism can adopt the recommendations as basis to understand tourists' co-creation experiences enabled by mobile devices technology.

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Do Smart Phones Bring Us Closer? A family life and vacation perspective

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Abstract

Relationships developed in families are crucial because these bonds play an integral part in learning how to function and interact in society. In the past, these bonds were strengthened by spending leisure time together as a family but now smart phone technology provides opportunities for individual entertainment, connecting on social media, and spending time physically together while being emotionally separated. This research looks at this issue from a systems theory perspective, conceptualizing families as open, self-regulating social systems with the smart phone being a technical system within the family system. The smart phone acts as a conduit between immediate family members and to friends, family, and social networks and information beyond. The main research question relates to analysing interactions within such a socio-technical family system. A secondary question entails how the interactions with smart phones play out in two different environments, the everyday family life and the family vacation.

Problem Definition

Technology is changing the way families communicate and spend time together. Many families now have smart phones which offer a hand held portal to entertainment, social networks and other distractions. Some say that these technologies are pulling families apart (Turkle, 2011) but others contend that this new medium has become an integral part of the mainstream family and aids in staying connected and with scheduling (Padilla-Walker, Coyne, & Fraser, 2012).

Although technology has changed the way families are communicating, it has not lessened the importance of family ties. Attachment and socialization skills are nurtured through continuous family interaction (Belcher, Peckuonis, & Deforge, 2011). However, families in contemporary Western societies are spending more time apart on a day-to-day basis because of dual careers and shift work (Valentine, 2006), so time spent together is important, especially while on vacation. The family vacation is a long standing tradition. It is an opportunity to spend time together, bond as a family, travel to new destinations, and create memories (Hilbrecht, Shaw, Delamere, & Havitz, 2008). The goal of this research is to gain an understanding of how families are mediating the use of

smart phone technology so that it does not interfere with family bonding in everyday life and especially on vacation.

Literature Review

Family bonding is defined as the amount of attachment, connection, or emotional closeness that family members feel towards each other (Bahr, Maughan, Marcos, & Li, 1998). Family vacations are important for family bonding because they provide a break in the normal day-to-day routine of family life and offer the opportunity to spend time together. Family vacations provide balance in families, they strengthen relationships and offer opportunities to problem solve as a family (Agate, Zabriskie, Agate, & TaylorPoff, 2009). Research on family bonding primarily deals with families in regular leisure settings; therefore further insight is needed for family vacations.

Family groups are staying connected with mobile technology because they offer flexibility and reassurance. Smart phones are growing in popularity because they combine social media, internet, email, texting, and mobile applications (apps) into one device and have quickly integrated into the fabric of everyday family life (Green, 2002). This everyday use has spilled over into the vacation setting as smart phones offer access to Web 2.0 applications, like travel review sites and blogs, which provide an endless supply of sharing opportunities and information while travelling (Gretzel, Fesenmaier, Lee, & Tussyadiah, 2011).

Smart phone use blurs the boundaries between the physically and technologically present and creates new avenues for people to communicate while they are travelling (Jansson, 2007). The instant communication that is offered by these devices alters the previous ideas of time and space, which provide the structure for human experience. It can be assumed that vacation experiences are being fundamentally affected by these changes (Gretzel & Jamal, 2009) and that families need to negotiate technology use on vacation so that it does not deter from the family experience and bonding.

Conceptual Development

The aim of this research is to understand the effect that smart phones are having on family bonding using a family systems perspective as the theoretical lens. Family systems theory suggests that members of the family are all interdependent and interactions between them create an open and continuous system that is always being influenced by the environment (Hill, 1971). Family systems are self-regulating, open systems and the added technological component converts inputs and outputs from the family members and plays a major role in self-

regulating within the system (Trist, 1981). In this case, the smart phone is a technological system inside the family system and interactions with each other and the smart phone will be discussed and observed. Therefore, the first research objective is to discover if and how families negotiate and/or regulate smart phone use within the family system.

Family Systems Theory is based on General System Theory (von Bertalanffy, 1968) which has some core assumptions applicable to all systems. These assumptions include that a system must be comprehended as a whole rather than individual parts and that human systems are distinctive in their ability to have self-reflexivity. Hill (1971) further states that the family unit is usually a task performing and adaptive group. This adaptability indicates that families tend to seek successful solutions to problems and then adapt those solutions to become normative behaviour (Cheal, 1991). Ackoff & Emery (1972) believe that purposeful systems have environments that affect the system, therefore each system can be considered to be a system within a greater supra-system. As a consequence, adaptive system behaviour within families will be analysed in reference to their smart phone use in two different environments, daily life and vacation, to see how they mediate this technology use within the family and if the environment of the family vacation acts as a catalyst for change in behaviour.

Proposed Methodology

This is a qualitative research project based on individual interviews and family group discussions. Due to the interdependent nature of families and family dynamics, a philosophical hermeneutic approach (Gadamer, 1977) is being used in an effort to understand both individual and global issues within the family group (Geertz, 1979). The hermeneutic approach, as a means to achieve an ethnographic understanding, can be explained as the circle of continuous tacking between the most minute details and global details to bring both into light concurrently (Geertz, 1979). With this approach, one must understand the whole of the intentions, beliefs, and context in order to understand the sentence, utterance, or act (Denzin & Lincoln, 2000). This form of research leads to thick descriptions, which Geertz (1979) describes as a multiplicity of complex structures which are knotted into one another.

The family today refers to a complex social reality (Popenoe, 2012) with different structures and cultural norms. This research will specifically look at family groups that have a traditional family at the core, with a mother and father and at least one child. The families will live in Australia or the USA, have a smart phone in the family and have vacationed within the last year.

The first stage of this study includes one-on-one interviews conducted face to face with family members aged six and above because children older than 5 can generally express their feelings and understand basic smart phone functions. These interviews will be semi-structured and have open ended questions to allow for flexibility. Questions will revolve around the topic of mobile technology use in their daily life, technology use among family and friends, and their feelings and emotions regarding smart phone technology use and behaviour. These interviews will be audio-recorded and verbatim transcribed by the researcher. The second and third part of the research will be family group discussions held in their home. Since this research is grounded in family systems, the family interview setting is important to view the interactions of the family members and gain some understanding of how they socialize and work together in their natural environment.

These interviews will be unstructured discussions with the topic being introduced at the beginning and the family encouraged to talk about how they use smart phones and other mobile technologies within their family and their feelings involving that use. The moderator will let the family discuss their feelings and then refer them back to different aspects of the topic for further discussion. Both topics will involve daily smart phone use in the family, how it is used, when and for what purpose, and who uses the smart phone, the difference being the context of their everyday life or family vacation. These group discussions will be recorded using a digital video camera then verbatim transcribed. The researcher will also employ a research journal, to write down any reflections, observations, and recurring themes immediately after the interviews are completed. Verbatim transcription will be done by the researcher along with notations about gestures, emotions, interactions, and other contextual elements of the interview. Since a thick description of these families is being sought, external cues and undertones will be noted to help to create a deeper understanding of the family dynamics. This study is a longitudinal study occurring over a year's time so the researcher will also seek out other times of observation of the family.

The recordings will be transcribed in Transana software, annotated and coded for themes. The analysis process is continuously dynamic as the researcher continues to refine the ideas and thoughts into themes. As themes are established, previous interviews will be reanalysed to look for similar themes that may have been undetected in the initial analyses.

Preliminary results

The initial stages of this research have been conducted and preliminary findings show that individuals are creating thresholds for their technology use. Depending on the situation, individuals have created boundaries for themselves for when it is okay to use technology, when it should be restricted or on silent and when it should be off or left at home. These results are also reflected in families, as families are creating boundaries for technology use within their home and daily lives. For example, the time spent around the dining table for nightly meals is a time when most families are choosing to not allow technology to interfere. Also, many parents set up restrictions on times of day or locations within the house that technology use can take place. While on vacation, technology use is dependent on the type of vacation. Many individuals and families are using camping as a way to leave technology behind and focus on their family. Conversely, when in the city, the smart phone is utilized as a dynamic tool for finding accommodation, navigation, information/activity searching and recommendations. The results so far suggest that families are trying to mitigate potentially negative effects of smart phone use in the family system by creating boundaries for use that are sensitive to time, location and type of family event. These boundaries are creating pockets of time that are allowing for uninterrupted family time and opportunities for bonding both in everyday life and on vacation.

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An investigation into the digital market research habits of Welsh tourism micro-enterprises

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Abstract

Current research identifies Welsh tourism micro-enterprises (WTMEs) as failing to compete on the digital marketing stage as a whole. The researcher is in the early stages of investigating the adoption of digital market research tools by WTMEs in Wales. The literature review focuses on technology adoption, digital market research knowledge, heterodoxy and facilitating factors. Recent conversations with WTMEs reveal methodological and sampling implications for the survey stage of the project. It is anticipated that WTMEs' digital market research use will reflect that of digital marketing overall in Wales, with some differences that could help provide specific and relevant support.

Problem definition

1.1 Background

The Internet and its applications have become ubiquitous. In this competitive environment, finding and holding onto customers is critical to business success. The key to developing lasting customer relationships is understanding customer behaviour online (Chaffey & Ellis-Chadwick, 2012). Businesses must grasp these factors to help customers through their decision-making processes and increase the likelihood of buying their services. Doing this well should improve customer service, loyalty, satisfaction and trust. Evidence points to Welsh tourism micro-enterprises (WTMEs) in Wales lagging behind in rising to the digital marketing challenge and Welsh Assembly Government (WAG) has stated a clear commitment to supporting WTMEs' adoption of ICT and online marketing in general (Welsh Assembly Government [WAG], 2012) due to their prominence in the Welsh tourism industry landscape. However the literature reveals limited research is available to date about online market research and small businesses in tourism, both globally and in Wales. The author is investigating this research gap, an aspect of digital marketing that is fundamental to the improvement, competitiveness and survival prospects of WTMEs.

1.2 Research question

The central question concerns the foundations of effective digital market research for WTMEs: If these businesses are underperforming in terms of ICT adoption and online marketing in general, how do they fare in relation to researching and understanding their existing and potential customers? What digital tools are they using to source this information? How effective is their implementation? How might policy makers and support services respond as a result?

1.3 Aim and objectives

The purpose of this study is to investigate the adoption of digital market research tools by WTMEs. To achieve this, four objectives have been identified, namely to:

- Critically review the literature surrounding key theories on technology adoption, heterodoxy in the tourism industry, digital market research knowledge and facilitating factors within and for WTMEs.
- Explore whether, and how effectively, WTMEs use digital market research tools to support their marketing activities.
- Develop a preliminary framework of WTME profiles relating to typologies of ICT adoption and knowledge acquisition in relation to digital market research.
- Relate primary research findings back to the literature and develop a best practice model for the effective provision of WTME support for digital market research.

Literature review

Heterodoxy in Tourism

Heterodox economics is an area of study that rejects mainstream economics and management theories (Jo & Schmidt, 2012, online; Mudoud, Bina & Mason, 2012; Heinrich, 2013). The researcher will explore how heterodox approaches apply to tourism and ICT, as a limited number of authors have ventured, implicitly or explicitly, into this area (e.g. Jones & Haven-Tang, 2005; Peters, Fehse & Buhalis, 2009; Thomas, Shaw & Page, 2011). These authors highlight WTME's characteristics and distinctiveness (heterodoxy) from other sectors, as well as the need to manage them differently. This is supported by Wang & Qualls

(2007), who recognise the heterodoxy of hospitality organisations and how they adopt ICT. This, applied to WTMEs in Wales, will help provide a model of tourism heterodoxy that will contribute to a better understanding of the barriers to this particular aspect of ICT adoption.

Technology adoption, diffusion and digital divide

ICT adoption for general management is widely-researched. Rogers (1995) pioneers this field with his Innovation Diffusion Theory (IDT). Whilst insightful, the very generalisability of IDT leads to the need for more specific theories (e.g. Straub, 2009). When applying these theories to tourism, Minghetti and Buhalis (2010) also use IDT to explain the digital divide that exists on many levels in tourism and have developed a complex model to illustrate it. Venkatesh, Morris, Davis and Davis (2003) review the key technology adoption theories comprehensively to develop the Unified Theory of Acceptance and Use [UTAUT]. Wang and Qualls (2007) offer a technology adoption model suitable for small and medium hospitality businesses, a useful benchmark in terms of identifying which aspects of it also apply to other WTMEs. Other academics apply ICT adoption models (e.g. Nassar, 2002; Buhalis & Deimezi, 2004; Lim, 2009; El-Gohary, 2012; Spencer, Buhalis & Moital, 2012) to case studies, looking at both specific tourism business types and countries. Their applicability to this case study and aspect of ICT will also be evaluated.

Digital marketing, market research and WTMEs

Academics have published extensively about digital marketing as a whole. Chaffey & Ellis-Chadwick (2012) discuss consumer behaviour, consumer data types and collection techniques and their importance for effective marketing. Dann and Dann (2011) provide a pragmatic procedure for online market research as part of business planning processes. Minghetti and Buhalis (2010, p. 271) emphasise the importance of *"how tourists and businesses develop their ICT skills and how are they able to use the available online resources."* Whilst much has been written about digital marketing and understanding consumers' online behaviour generally, comparatively little has been researched about WTMEs specifically.

Facilitating factors

The author has found few frameworks relating to government support, ICT skills or training needs provision for WTMEs in the specific contexts of marketing or online market research. Braun and Hollick's (2006) pilot study of online skilling and knowledge sharing in tourism will be examined as a possible theoretical, methodological and best practice benchmark for WTME support provision. Other studies have tended to be country and/or sector specific and focus on broader e-marketing rather than on digital market research (Duan, Mullins, Hamblin, Stanek, Sroka, Machado & Arango, 2002). Further research is needed on this aspect of the project.

Preliminary review of the literature has revealed a gap in current research specifically relating to ICT adoption of digital market research tools by WTMEs in Wales. The heterodoxy of WTMEs reveals a need to examine them distinctively from larger businesses.

Conceptual development

From preliminary readings, the researcher has developed a draft conceptual model (shown in Fig. 1 below). The model is fundamentally based on the UTAUT model discussed previously and incorporates a behavioural pyramid from Nassar's (2002) hierarchy of considerations of which aspects of hotels' websites support their brand development, and WAG's (2012) business maturity ladder. The pyramid has in turn been adapted further to apply to the more specific digital marketing context by including both Dann and Dann's (2011) and Chaffey and Ellis-Chadwick's (2012) digital market research "tool boxes".

Proposed methodology

A range of WTMEs by sector and their approach to online marketing are being identified. Through close collaboration with Capital Region Tourism (CRT) on their SME ICT diagnostics project, relevant businesses were selected for an initial sample. Four in-depth pilot interviews with owners were recently carried out. These focused on typical profiles, the relative importance of direct determinants and the extent and spectrum of online market research tools usage. Initial analysis reveals two broad findings: first, combinations of demographic factors (mainly gender and age) and business type may have a bearing on the likelihood of

adopting digital market research technologies. Second, interviewing WTMEs that have participated in the CRT diagnostics and similar programmes excludes businesses that may not have such an awareness of marketing or ICT needs. Paradoxically, participant WTMEs in such schemes may already be “doing the right thing”. Reaching non-participants of SME support schemes must be considered to investigate all representative businesses effectively. This will have methodological implications when sampling for the continuing phases 1 (qualitative) and 2 (quantitative). Phase 2 will test the preliminary typologies and themes developed from phase 1 and the factors influencing these with an extensive survey of WTMEs to identify their current digital market research practices and needs. Exploratory Factor Analysis will be used to evaluate the relationships between the key moderators and each element of the model. This will allow the refining of the conceptual framework towards a best practice model.

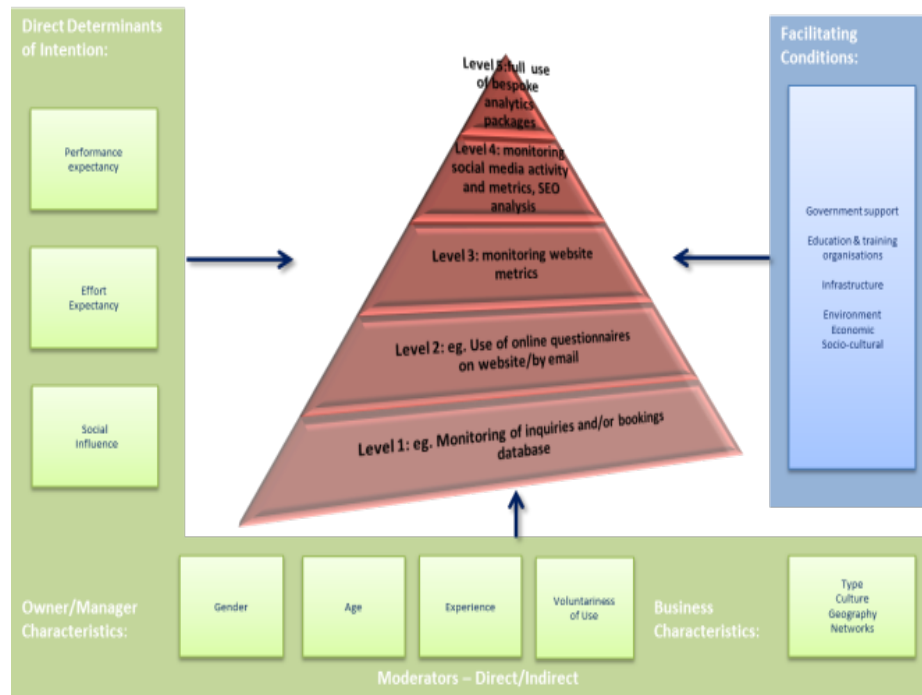


Fig. 1. Draft conceptual framework adapted from Nassar (2002), Venkatesh et al. (2003), Dann & Dann (2011), Chaffey & Ellis-Chadwick (2012).

Anticipated results

The researcher anticipates the project will reveal results that broadly reflect WAG's report findings relating to WTMEs and digital marketing as a whole. Nevertheless she has already found some variations in relation to different WTMEs' approaches to and understanding of digital market research as well as actual usage has already been found. In particular, different person-specific moderators relating to business owners, combined with the types of WTMEs involved, already appears to influence a WTME's extent of online behaviour more than previously thought. Such distinctions could help identify specific and appropriate support needs for these WTMEs at a range of entry levels.

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Impact of Internet Communication Technology on Bricks & Mortar Travel Agents and Changes in Supply Chain Positioning

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Abstract

This paper discusses the changing role of Brick and mortar travel agents due to Internet. It is a fact that the popularity of the Internet and the Wide Web has provided a whole new virtual platform to conduct business called E-Business, and created both opportunities and threats for brick and mortar travel agencies in the tourism industry. For travel agencies, understanding the perceptions of travel agents regarding computer usage and the important elements of functional websites is necessary to ensure success when adopting E-Business. Questionnaire investigation and statistical analysis were applied in conducting and analyzing this research and see what strategies the conventional travel agencies should adopt to not only survive but also to grow in the present circumstances. This paper has great value not only to travel industry but also to many other similar industries facing threat of internet revolution like book and music stores, etc.

Research Context:

The tourism industry is massive on a global scale and continues to grow. In 2011, more than 983 million worldwide tourist arrivals were recorded, representing US\$ 1.3 trillion dollars – an annual growth of 4.6% - compared to 940 million arrivals in 2010 (The United Nations World Tourism Organisation, UNWTO, 2011).

Tourism is important and, in many cases, vital for numerous countries around the world. It brings in large amounts of income in payments for goods and services, accounting for 30% of services and 6% of overall goods and services, globally. It also creates opportunities for employment in the service sector. Australia's, great success in tourism and travel related services ranked number 7 (UNTWO, 2012) with gross receipts of \$31.4 billion, in 2011.

Airline travel is the largest sub-sector of the tourism industry accounting for almost 16% of travel and tourism industry sales, growing by 4% in 2012 to reach US\$ 1075 billion in 2012 (WHOT). This growth is around 4% increase in international tourist arrivals which reached 1035 million in 2012. An Additional US\$ 219 billion was recorded in receipts from international passenger transport, bringing exports generated by international tourism in 2012 to US\$ 1.3 trillion. This growth has a ripple effect that goes deep down from airline to the travel agent selling tickets and sharing a piece in the pie of growth.

In the last decade easy access to Internet has changed the way air travel is planned and bought (Athiyaman; Hatton, 2004; Vinod, 2011) and how services are rendered. This has impacted on how services are rendered by suppliers (Christodoulidou, Connolly, & Brewer, 2010; Gronflaten, 2009; Hoffman; Sigala, 2007; Smith, 2007) and consumed by air travellers. Internet's easy accessibility has changed the way people plan their travel and buy tickets requiring travel related companies to think differently about how they market their services; rather than relying heavily on middleman they will need to strengthen their own capabilities to reach a range of customers from someone living next door to their office, in a remote country town or in a restaurant in the Snowy Mountains.

Consumers today enjoy faster download and upload speeds compared to a decade as carriers such as Telstra, Optus and Vodafone have gone on to LTE and 4G networks, ensuring a download speed of 20mps on smart phones like iPhone 5 and Samsung Galaxy S4, etc. The Australian Government's National Broadband Network (NBN) roll out initiative will further enhance the browsing and buying experience of consumers in Australia. At the same time more and more free Wi-Fi outlets are providing cheap and easy access to consumers to facilitate online buying. US travel buyers Interactive Advertising Bureau (IAB) and TNS Infratest (2012) has conducted extensive research on customers who used the Internet to plan and search a single travel and then actually purchased it. The results were staggering high; in 2012 results totalled 81% vs 74% in 2011, with package holidays results totalling 82% vs 70% in 2011.

For the travellers themselves there are many advantages of Internet travel buying, including:

- the ease and convenience of searching, planning and buying online
- time savings associated with the ease of online payment, such as credit card payment, instead of other payment methods, such as bank cheque or, cash, which may also involve additional time to visit and make payments at an office
- competitive prices, special discounts and unlimited add-ons (for example, “stay at this hotel in Dubai and choose from a free desert safari or a free dinner for two on the Jumaira beach, etc.”), and
- access to extensive research information.

The Internet savvy traveller can research and shop in just about any place with wireless connection (Internet or Wi-Fi) and at any time of the day or night. With continuous improvements in the wireless technologies (Wei & Ozok, 2005) Internet access has become cheaper to use with many companies and public enterprises going a step further to provide free access to wifi Internet. TPD, a leading Internet service provider, is currently offering for \$69/month, any house can have ADSL 2+ Wi-Fi modem, unlimited access to Internet with the blazing speed of over 20mps connection. Similarly, the success of smart phones has taken the travel and tourism industry into a new era of consumer convenience.

The ability for consumers to pay suppliers directly, using a credit card or virtual bank such as PayPal, Google Wallet, ikobo, xoom, etc., add up to cost savings since suppliers can reduce transaction costs (i.e. commission, displays and publicity, etc.). The term for this business model is called ‘disintermediation’ (Hatton, 2003, Gharavi 2004, Bigne Et all 2008).

According to TravelClick (2012) online channels are gaining market share in terms of actual reservations at a much faster speed than predicted. Online sales that was \$266 billion in year 2008 (Fig: 1.1) rose to \$374 in 2012 and accounted for 38.9% of the total sales. The upward trends shows a very positive sign for online booking and is expected to exceed \$500 billion in year 2016, with online sales accounting for 46.25% of total travel bookings.

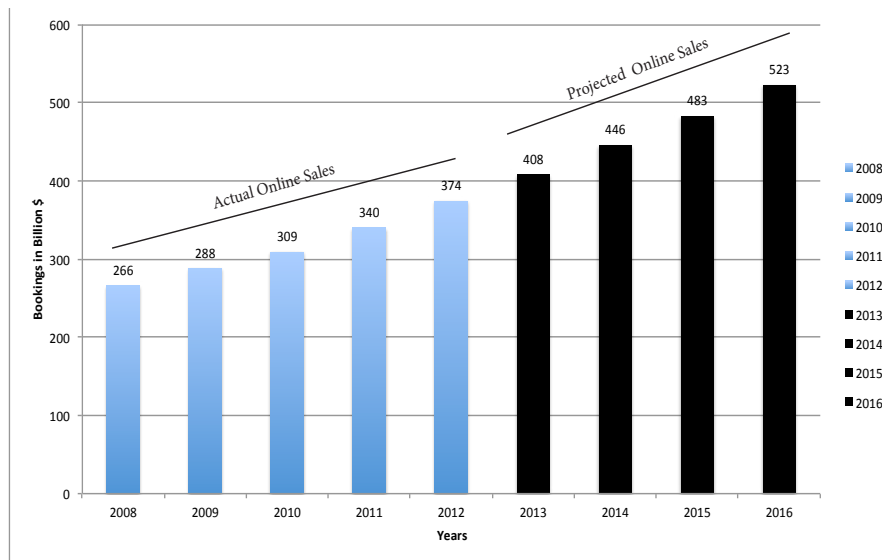


Figure 1.1 Online Travel Bookings 2008 – 2016 (Source: New media Trend watch – 2013)

Many consumers have divided the process of planning and buying tickets into two parts i.e. search (or planning) and actual purchase. They believe the Internet is an extensively powerful medium to search, gather and explore information. Looking back at the research conducted in 1996 by Schonland and Williams, and by Walle, people are attracted to using the Internet over other information-providing media and this not only holds true today, but further enhanced by the fact that US travel industry spending on the digital advertisement has increased (eMarker, May 2013) from 1.84 billion (7% of total digital spending) to 3.48 billion in year 2013 and predicted to reach 4.70 billion (8.5%) in 2016. Online shoppers are increasingly savvy and willing to spend more online. Online shoppers in US spent \$226 billion online in 2012, and that number will climb to 327 billion in 2016, according to Forrester Research. Also mobile browsing of travel websites has more than doubled in the past 12 months to an average 20.5% of all traffic

surveyed (Hotelmarketing.com, June 2013). Vacation rental online bookings surged in the US, jumping from just 12% of the overall vacation rental market in 2007 to 24% in 2012 (PhoCusWright, 2012) and three in ten vacation rental dollars to be spent online by 2014.

To entice and keep the interest of online customers, many innovative companies (between Jan 2011 – May 2013) have jumped in with websites like Travel Nerd (www.travelnerd.com) which help the customer find interesting places inside an airport like free Wi-Fi, coffee bars, bathrooms, parking, etc. Peek (www.peek.com) helps travellers know about functions, concerts, hotels near a destination and book online at a discounted price. Chargerback (www.chargerback.com) help you get your lost luggage back, Voyagin (www.voyagin.com) gives you a new concept of not only visiting a city but interacting with the locals and Milepoint (www.milepoint.com) provides a very simple way to replace your complicated frequent flyer program. It will give you an additional experience of dining around airport, taking you around a city and helping you shop when you have time between your international flights.

The areas most lacking in travel agent marketing are customer relationship management, after-sales service and customer information updating (Chakravarthi & Gopal, 2012; Rajamma, Paswan, & Ganesh, 2007; Zhang & Morrison, 2007) and *there is a need to explore if conventional travel agencies have adopted any new strategies to tackle them*. They must have done to prove all predictions about them wrong and succeeded in avoiding joining the list of Music, Video and Book stores closures. Flight Centre the market leader with over 13500 employees in 2011 (increased from 11200 in 2009) has adopted a new model of “Click and Meet” in mid 2009 (Turner, 2013) and from lowest ever net profit in 2009 has shown a jump over \$200 million (Fig: 1.2) first time in the history of the company.

Research Methodology:

The research study was based on both primary and secondary data collection. Primary data was gathered through questionnaires, interviews, and surveys. However, the secondary data was extracted from various news items, journals, articles, and books.

The proposed study involved two distinct research stages. At quantitative stage which had employed a survey followed by a qualitative stage that featured in-depth interviews the first stage explored the impact of ICT on the frequent travellers and brick and mortar travel agents through a well-developed and pretested questionnaire. Subsequently, In-depth interviews were conducted as they offer a comprehensive picture of the topic being explored (Creswell, 2005). The collected information formed the basis for the second stage of the study, and was used to conduct semi structured in-depth interviews from both frequent travellers and B& M travel agents. That mixed-methods research approach was exploratory in nature (Onwuegbuzie & Johnson, 2004), conducted in two parts with priority given to the secondary stage (Creswell, 2005). This mixed-methods exploratory approach was considered by the researcher to be the most appropriate to address these research questions and to achieve the proposed study goals.

Potential participants included randomly selected registered travel agents and air-travellers in Australia. A comprehensive questionnaire was sent after an advertisement via email to all potential participants. As expected out of 90 travel agents and 150 consumers, some 26 travel agents and 57 travel consumers provided a positive response. Following that, the researcher conducted an in-depth interviews of six travel agents and 8 travel consumers to further study the impact of ICT (Information Computer Technology) and how they were keeping themselves competitive in the changing supply chain positioning.

The most significant features of the interview approach were:

- Actual form of the questions were guided by the survey results
- Questions were left open-ended and used as prompts to elicit additional information which was very significant.

Porters' five forces model was utilized in this study in the examination of the competitiveness of travel agents/brick-and-mortar after accounting (Rajasekar & Raee, 2013) for online presence. Furthermore, bargaining power of their customers and suppliers, threats of new entrants, etc., after changes in their supply chain positioning.

The researcher has conducted an in-depth study to explore what are these areas, answering the main research question included in this study:

- *Have traditional (brick and mortar) travel agents survived by reintermediation and providing better products and services both through traditional travel agencies and over the Internet – or are other factors responsible for their survival?*

This study has also incorporated the following additional research questions:

- *What type of consumers prefer traditional travel agents and why?*
- *What are the new offerings and strategies adopted by travel agents to survive and grow?*
- *How confident are travel agents and their customers of a continuing, successful future?*
- *What future do travel agents forecast for themselves?*

Significance of Research:

This study is of great significance not only for the tourism industry, but also for individual travellers. It will increase the understanding of the availability and benefits of different booking models. Finally, it will shed light on the current shifts in the travel and tourism industry and how brick and mortar travel agents are not only keeping themselves competitive but also taking advantage of the new scenario in Australia.

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Augmented Reality Gaming: A new Paradigm for Tourist Experiences?

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Abstract

Location-based mobile Augmented Reality (AR) Games are an innovative way to attract tourists into challenges and interactive gameplay while they are exploring an urban destination or cultural heritage site. The aim of AR games is to create a deeper level of engagement with the destination by adding a game experience that educates through fun using location-based storytelling, personalised features, and social interactions. The player location and the context of playing are important dimensions in location-based AR Gameplay. However, little is known by game designers on how to design location-based AR Games in the context of tourism. This study uses the construct of presence throughout AR gameplay delivering historical facts and information about a destination and combining them into an interactive engaging gaming experience for tourists.

Problem Definition

The generation of digital natives dominate the language of digital media and demand new forms of media applications for their journeys to create engaging experiences. Smartphones and tablets provide a ubiquitous link between real and virtual environments (Mortara et al., 2013) which enable mobile and location-based games becoming pervasive and being played in any situation of life. Besides, learning might be a main reason for travelling as it broadens the horizon and enhances the understanding of other cultures and history, but has been a long neglected area in tourism research (Falk, Ballantyne, Packer, & Benckendorff, 2012).

In order to address young traveller's needs, the tourism industry needs to implement new mobile technologies, which combine both elements – entertainment of video games and learning about cultural facts in a new phenomenon to engage visitors with the holiday destination. Serious Games combine these elements, creating engaging game experience (GX) in a fun and entertaining way with the aim of learning (Mortara et al., 2013; Susi & Backlung,

2007). These games are designed for augmented and real experiences and engage players with playful interactions into tourism content, which is not possible with ordinary Augmented Reality (AR) technology or other static mediation tools (Benyon, Mival, Ayan, O'Keede, & Mokey, 2012; Mortara et al., 2013). The symbiosis of Serious Games, AR technology and location-based storytelling provides an opportunity to create new engaging tourist experiences. Location-based AR Games can be defined as *making use of the player's physical location via GPS sensors, a compass and the inbuilt mobile device camera to project virtual 2D and 3D objects in real time on the player's mobile screen in order to facilitate interactive gameplay* (Azuma et al., 2001; Jacob, da Silva, Coelho, & Rodrigues, 2012).

However, designers have little advice on how to design for an engaging game experience in the context of tourism (Benyon, Quigley, O'Keefe, & Riva, 2013). The concept of *presence* (Lombard & Ditton, 1997; Takatalo, Hakkinen, Kaistinen, & Nyman, 2011) can be useful to help feeling present in a medium and therefore engage with the visited destination to experience the location-based storytelling in an interactive form (Admiraal, Huizenga, Akkerman, & Dam, 2011).

Literature Review

Although design has already a strong foothold in practice, the research community slowly applies design as a research discipline in HCI (Zimmerman, Forlizzi, & Evenson, 2007). Besides, research in gaming is a young discipline with little theoretical background (Eyles & Eglin, 2008; Hevner, March, Park, & Ram, 2004). According to Eyles and Eglin (2008) Game Design is a complex process which is still missing a theoretical methodology on how to approach Game Design Theory (GDT) for location-based AR Games. Although, Game Design Research consists of many implicit and explicit models, the theoretical underpin for location-based AR games is still missing (Eyles & Eglin, 2008).

Game Design researchers (Chang, Koh, & Duh, 2011; Engl & Nacke, 2012) argue that a formal top-down approach of analysing game systems (Hunicke, Leblanc, & Zubek, 2004) and the interaction with games is insufficient for studying mobile game experience as this approach considers games as systems. Instead, games are processes influenced by the player's interaction and reaction through actual gameplay and, therefore need to be approached from a user perspective (bottom-up), which is also congruent with theories of HCI and experience evaluations

(Bernhaupt, 2010). Thus, a user-centred design (UCD) as a common approach in HCI is applied to design and evaluates user experience of a location-based mobile AR Game (Cai, 2009).

Experience research in game design is revealed in the latest state-of-the-art literature by Carrigy, Naliuka, Paterson, and Haahr (2010), Takatalo, Hakkinen, Kaistinen, and Nyman (2011), Engl and Nacke (2012), and Blum, Wetzel, McCall, Oppermann, and Broll (2012) who emphasise *presence* as a central concept in location-based game experience evaluation (Brown & Cairns, 2004). The *concept of presence* (de Kort, Ijsselsteijn, & Poels, 2007; Lombard & Ditton, 1997), is an important indicator for player satisfaction which leads to a positive player experience and can be understood as a “perceptual illusion of non-mediation” (Lombard & Ditton, 1997, p. 3) and describes the sense of being in a particular place (Riva, Waterworth, & Eva, 2004). Presence, as a product of one’s mind is a state, of consciousness to which one feels presence in the mediated environment and with other real and virtual people (Ijsselsteijn, de Kort, Poels, Jurgelionis, & Bellotti, 2007). New technologies such as location-based AR games create an illusion of a mediated experience which seems to be natural to the player (Riva, 2008) as the virtual and the real world blend into one and disappear from the user’s phenomenal awareness. Players changes the view from being an outside observer to be completely surrounded by the three-dimensional game environment (Ijsselsteijn et al., 2007)

Presence is strongly related to the concepts of flow (Csikszentmihalyi, 2002; Jegers, 2007), immersion (Brown & Cairns, 2004; Ermi & Mäyrä, 2005; Mäyrä & Lankoski, 2009) and engagement (Schönau-Fog, 2011). However, these concepts cannot be applied in analysing location-based AR games immersion and flow experience since these games are played in the ordinary world and the mobile game experience cannot be sufficiently described by the eight components of flow that absorb the player’s attentions or immersion which describes the player of being submerged in a virtual world. (Ejsing-Duun, 2011). Evaluations in mobile game experience revealed that player’s feeling of presence shifts from the virtual world into real location and places (Rafael Ballagas, Kuntze, & Walz, 2008; Carrigy et al., 2010).

Previous studies on location-based AR gaming identified game design elements which create engaging experience for the player. *Location-based storytelling* (R. Ballagas & Walz, 2007; Barbas & Correia, 2006) is a major factor for gaming and tourism to engage visitors in the tourism destination and let them interact with real and virtual characters. The *social interaction* (Arhippainen & Tähti, 2003; Blum et al., 2012) of the player with others increases the sense of presence (co-presence). Göbel, Wendel, Ritter & Steinmetz (2010) emphasise the importance of *personalised gameplay* to increase the involvement and *learning abilities* in these games. Besides, the *context of gameplay* is an important element for location-based AR games being used as a tourism mediation tool in different occasions and from players with a range of dicers game experience (Engl & Nacke, 2012).

However, the gameplay can be affected by external factors leading to a negative player experience (Ballagas, Kuntze, & Walz, 2008, Carrigy et al., 2010). Engl and Nacke (2012) argue that contextual gameplay experience can be seen in three different layers; (1) game system, (2) player and (3) context. Their proposed model will be used as a basis to identify dimensions of presence and factors of gameplay that lead to *engaging experience* in location-based mobile AR Games.

The creation of engaging playful experiences in tourism is crucial to building up a higher sense of presence, which cannot be evoked with other media such as video screens or other tourism mediation tools (Benyon et al., 2012; Falk et al., 2012). The doctoral study draws on these arguments and critically explores the experience theory in Game Design to identify factors contributing to presence in the context of location-based mobile Augmented Reality Games for tourist environments.

Conceptual Development

The concept of the research project is shown in Figure 1 providing and overview of how the study is structured. The general structure is derived from Walls et al.(1992) and Hevner et al. (2004) and specified for game design in the context of location-based AR games Lindley and Sennersten (2008), Eyles and Eglin (2008), and Nacke and Drachen (2011). Location-based AR games in tourism are the

drivers of the research purpose and will be analysed and modified to meet the requirements of tourists, as they need specific information moving in an unfamiliar environment.

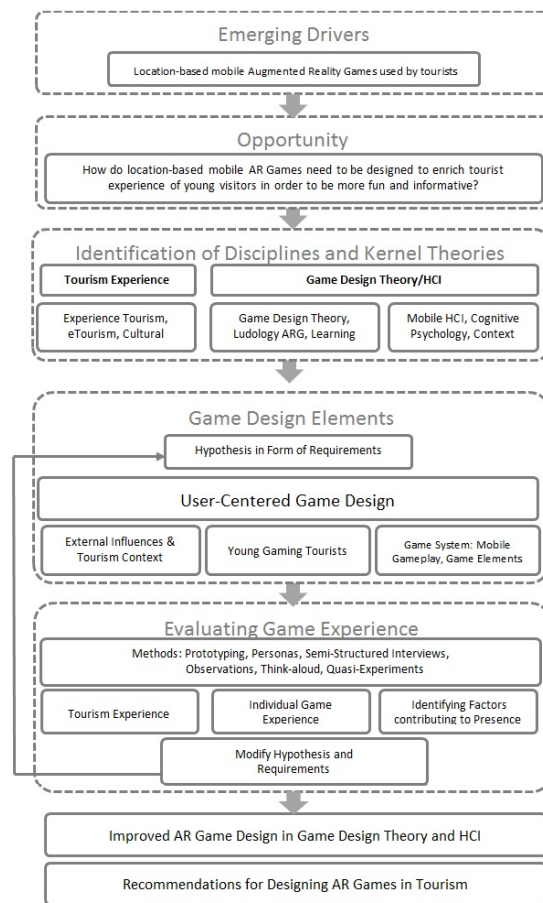


Fig. 1. Design of the Conceptual Research Development Framework

The research question how location-based AR Games are best need not be designed to create an engaging experience for tourists will be facilitated by

looking into tourism experience (Benyon et al., 2012; Mortara et al., 2013) and game experience research (Ballagas, Kuntze, & Walz, 2008, Carrigy et al., 2010; Engl and Nacke, (2012). A user-centred game design (UCGD) approach is applied (see proposed methodology) to identify these user requirements in order to improve the design of location-based AR Games and provide recommendations for designing games.

Proposed Methodology

As game design is initially based in HCI theory (Cai, 2009) the evaluation of user requirements will follow a bottom-up approach using an iterative design approach based on a user-centred design process (Chen & Su, 2010). It will not be part of the research project to technically design and develop a game prototype as an already existing AR game for tourists will be used. An inductive user-centred design (Chen & Su, 2010; Wood & Romero, 2010) will be used to assist the identification of user requirements which have an impact in the creation of engaging experiences (von der Pütten et al., 2012).

The epistemology of the research is subjective by nature as the evaluated factors contributing to presence and the dimensions of presence for a location-based AR Game dependent on the individual player experience. Thus, analysing experiences is a complicated and challenging process and requires the identification of appropriate methods to measure game experience, bearing in mind the complexity of analysing contextual game experience and subjectivity (Bernhaupt, 2010; Vermeeren et al., 2010).

A *user-centred design approach* is applied to elicitate user requirements which involve a continuous requirement elicitation throughout the prototype development circle using different research methods (Bernhaupt, 2010). Although the development of a new location-based AR Game might not be the scope of this research project as the technical development will be either outsourced or resort to an already existing AR Game, the research starts from the premise that an AR Game will be developed which runs through all the stages of a user-centred design. The qualitative data collection is conducted in four phases.

Anticipated Results

The research is expected to contribute to the body of experience theory in game design by identifying factors contributing to the concept of presence for location-based mobile Augmented Reality Gaming in the context of tourism. The research will provide a conceptual framework elaborating the dimensions of presence based on the identified game design factors.

The research will also contribute to practice by providing design guidelines for tourism decision makers and gaming developers for location-based mobile AR Games in the tourism context. The study serves as a mediator linking technical and tourism jargon in order to establish a consistent terminology within the creation of location-based mobile AR Games.

Author's Notes

The dissertation has entered the second year by which the literature review has been done to completion and the next step of eliciting suitable methods will be undertaken.

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Why do travellers change their trip?

Effects of context, individual, and information factors

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Abstract

The travel decision-making is a complex and context-dependent process. A review of the literature indicates that relatively little research has focused on understanding traveller behavioural changes while *en route* or at the destination. A series of quasi-experiments are proposed to understand the nature and degree to which travellers will adjust their trip plans. It is argued that the results of this study will contribute to the theoretical foundation of on-site traveller's decision-making, and from a practical perspective it is expected that this study will help to provide a stronger foundation for developing more effective IT systems.

Problem definition

The trip is a very complex process involving many 'sub-decisions' occurring continuously from the early stage of deciding "where to go" through to "what are we going to do now" and beyond (Choi, Lehto, Morrison, & Jang, 2011; Dellaert, Ettema, & Lindh, 1998; Hwang & Fesenmaier, 2011; Jeng & Fesenmaier, 2002; Stewart & Vogt, 1999). As such, a trip is considered a portfolio of products and services that are characterized by heightened risks associated with uncertainties of outcomes (Dellaert et al., 1998; Jeng & Fesenmaier, 2002; Roehl & Fesenmaier, 1992). Consequently, the environment defined by the situation or decision context exerts considerable influence on a realized or constructed travel behaviour (March & Woodside, 2004; Smallman & Moore, 2010). Despite the inherent complexity of the trip, the literature often describes travel planning as linear problem-solving behaviour that includes problem recognition, information search, alternative evaluation, choice and purchase, and post-purchase evaluation (Sirakaya & Woodside, 2005; Um & Crompton, 1990; Woodside & King, 2001). However, travellers are less rational than implied, their information search is less intensive

and the situation has become even more important (Decrop, 1999). Importantly, traveller decisions continue throughout all stages of trip (i.e. pre-trip, on-site trip, and post-trip), indicating that the general consumer decision model (e.g. a funnel metaphor) does not accurately reflect decision making with a trip (Martin, Sirakaya, & Woodside, 2011). Finally, it is posited that trip decisions on-site are even more complex than those in pre-trip stage since travellers face a limited situation (i.e. money, time) that may cause regret or desire in traveller's mind (Moore, Smallman, Wilson, & Simmons, 2012). Therefore, it is important to understand the traveller decision-making process *en route* and at the destination by considering the stages of the trip, the nature of information and other contextual factors at the destination. To do so, this study will first examine the traveller's decision-making process at the destination in a broad sense; then, the study will describe the use of information sources, individual's characteristics, situational effects, and the corresponding unplanned behaviours; last, this study will propose a three stage methodology for measuring the decision making process at the destination and discuss the implications of the anticipated results.

Literature review

Traveller decision-making is adaptive process whereby there is a dynamic and an interactive adjustment within their surrounding environment at the destination (Moore, 2008; Smallman & Moore, 2010). Hwang (2010), Hwang and Fesenmaier (2011), and Stewart and Vogt (1999) argued that travellers often change their original plan in order to adjust to decision environments and optimize their benefits. Traveller's unplanned behaviour can be considered as a sense-making process in that sense making is the process of structuring the unknown situation (Waterman, 1990); and the activity that enables travellers to understand their surrounding environment and identifies differences between the realized and expected environment (Weick, Sutcliffe, & Obstfeld, 2005). Not all individual engage in his/her environments in the same way; rather individuals actively construct and perceive their experiences differently (Wright, McCarthy, & Meekison, 2003). Thus, individuals put their efforts on the process of a sense making so as to adjust their behaviour to the environment. Based upon definitions, a traveller needs to adapt to an unexpected situation through a sense-making process when travellers do not expect and prepare a specific event and

situation during their pre-trip planning stage. (Heifetz, Grashow, & Linsky, 2009).

Travellers' on-site behaviour has been characterized in two different ways: 1) as a planned and 2) an unplanned behaviour (e.g., Chang, Stansbie, & Rood, in press; Chung, Koo, & Kim, 2014; Hwang, 2010; Hwang & Fesenmaier, 2011). This study focuses on an unplanned behaviour that comes from spontaneous behavioural changes at the destination. As such, the definition is sharply contrast with a planned. Unplanned behaviour is "a buying action undertaken without a problem previously having been recognized or a buying intention formed prior to entering the store" (Engel et al., 1982, p. 483). Following this, travellers' unplanned behaviour at the destination may come from what travellers really want to do rather than what they plan to do at pre-trip stage (March & Woodside, 2005). This study considers information, context, and individual factors as important influencing factors to understand travellers' on-site behaviour changes (Lewin, 1941; Terborg, 1981; Endler & Magnusson, 1976; Chatman, 1989; Belk, 1975; Vogt & Fesenmaier, 1998).

The effects of context factors on travellers' decision-making are well-documented in tourism literature. In particular, Hwang (2010) and Stewart and Vogt (1999) argued that travellers consider the *en route* conditions during their decision-making process. Travellers choose alternative behaviours (e.g. add, skip, and substitution) and unplanned visitations (e.g. attraction, event, and restaurant) because of sudden changes in *the en route* condition (i.e. new information, context) (Hwang, 2010). This perspective defines *en route* conditions (i.e., newly discovered opportunities and constraints) as a series of decision contexts that affect travellers' decision making at the destination. Decision context is often defined as constrained by different situations such as: (1) determined by a specific time and place, (2) include physical surroundings, social setting, time, task, and emotional states, (3) are dynamic and contextual, and (4) possibly changed during the decision framework (Crompton, 1996; Jeng & Fesenmaier, 2002; Lamsfus, Xiang, Alzua-Sorzabal, & Martin, 2013; Pearce, 1982; Simonson & Tversky, 1992; Urry, 2004). For example, a reversal may occur with the sudden availability of discount rate (or free entrance), which leads to an activity being preferred, that was previously discarded due to the cost constraints. More importantly, mobility

is important for understanding the decision context in tourism literature and includes personal, social, and geographic (physical) aspects (Lamsfus et al., 2013; Pearce, 1982; Urry, 2004). Therefore, this study operationalizes the decision context as physical context and social context.

The literature suggests that characteristics of the traveller (e.g. decision styles, prior experience) influence the degree to which a person is willing to change his/her original trip plan. Each individual has different abilities to recognize a change as an opportunity and to deal with new and unexpected situations (Connor, 2006; Raudsepp, 1990). In addition, Jeng and Fesenmaier (2002) found that individual differences (e.g. involvement, knowledge, personality) influence traveller's decision process allowing either to stay the same or to change plan in an adaptive way. For example, travellers who have many experiences and a wide knowledge of destination are more likely to change (or modify) their original plan in response to an unexpected situation or event. More recently, Hwang and Fesenmaier (2011) empirically demonstrated that various individual factors (e.g. previous experience, multi-destination travel preference, and level of spontaneous trip decision making) affect traveller's planned and unplanned behaviours at the destination. Among a number of different individual factors, Mischel (1969) argued that individual may choose short-term emotional pleasure instead of long-term benefits (or rational decision) because of individual personality and character traits. Verplanken and Herabadi (2001) and Dhaundiyal and Coughlan (2009) empirically showed the evidence that impulsive tendency is rooted in personality traits which definitely influence on impulsive behaviour in shopping context. Therefore, this study considers personality traits and decision styles as individual factors.

Lastly and the most importantly, the decision context and individual traits ultimately influence travellers' information behaviour in terms of acquisition, perception and use while their decision-making (Belk, 1975). Travellers typically try to choose an optimal decision but it is often limited by conditions and constraints, which comes from what they know or which situation they are facing on, so-called "bounded rationality" (Bettman, Luce, & Payne, 1998; Conlisk, 1996; Newell & Simon, 1972). In particular, high levels of uncertainty among decision contexts eventually cause more efforts on information searching in that information have functional, hedonic, innovation, aesthetic, and sign needs (Roehl & Fesenmaier, 1992; Vogt & Fesenmaier, 1998). In addition, a behavioural framework for traveller's decision support system, proposed by Gretzel, Hwang, and Fesenmaier (2012), argued that the structure of the decision task and context

determines the nature of an information searching behaviour, which in turn, ultimately affects change in their plans (and on site decision making). As such, traveller searches for the information during all stages of the trip behaviour, not limited to one specific period, resulting that the information could help travellers' understanding of the environments and destination deeply, which in turn, affects trip experience and cause unplanned behaviours at the destination (Gretzel & Fesenmaier, 2009; Jeng & Fesenmaier, 2002; Wang, Park, & Fesenmaier, 2012). Travellers search for information during the trip to help make sub-decisions (e.g. activities, accommodations), but also give reassurance that a completed decision was a good enough (Moore et al., 2012). In addition, recent advances in mobile devices expand traveller's access to information and therefore, significantly change the trip planning environment. In this study, information inconsistency and information argument framing are considered as influencing factors that affect changes in trip plan.

Based upon this literature this study considers three factors (e.g., context, individual, and information) as important factors effecting traveller's on-site behavioural changes. As such, the overall objective of this study is to evaluate the role of these three sets of factors in determining traveller decision making process at the destination. Thus, the following research questions guide this study:

Research question 1: What are the underlying mechanisms of travellers' unplanned behaviours at the destination?

Research question 2: What are the effects of information, context, and individual factors on travellers' decision outcomes at the destination?

Research question 3: Do context and individual factors have a moderating/mediating role on the relationships between information search and on-site decision-making?

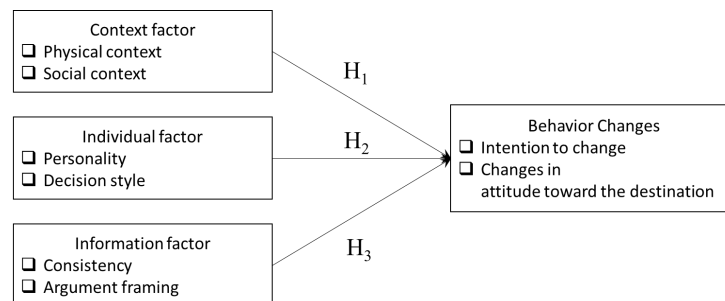


Fig. 1. A proposed conceptual model

Proposed methodology

Multiple methods are required to capture the whole complexity of travellers' on-site decision making; each of the phases are described below:

Phase 1. The first phase of the study focuses on reviewing the journal articles on unplanned behaviours and on-site behaviours in order to develop a theoretical foundation of on-site travellers' decision-making process. In doing so, if necessary, a case study can be utilized to clarify the finding of a thorough reviewing on the travellers' on-site decision-making process.

Phase 2. A series of web-based experiments with hypothetical scenarios will be designed to test hypotheses derived from the proposed theoretical foundation. This study will implement multiple controlled quasi-experimental studies. Each study will be specifically focusing on one factor and consequently, the other factors will be strictly controlled. In addition, multiples scenarios will be prepared to provide a quasi-travel experience for randomly assigned respondents. For example, information consistency (consistency vs. inconsistency) x message framing (positive vs. negative) between subject factorial designs with four scenarios will be used and context and individual factors are controlled for each scenario. Participants will be asked to answer self-administered questionnaire after being exposed by each scenario. This study will recruit respondents characterised with diverse demographic profiles in order to increase the external validity of the findings. Data will be analysed using independent and paired t-test and MANCOVA to test research hypothesis.

Phase 3. The goal of the last part of this study is to test further the relative importance of the respective factors in real world settings. In doing so, this study will design and conduct a field experiment based on the results of Phase 1 and 2. Ultimately, this study aims to develop a mobile recommender system (i.e. Smartphone application) that incorporates the results of all the three Phases.

Thus, it is argued that the analysis of the results of the combination of these three approaches provides the foundation for developing a better understanding of travellers' decision making and that this information provides principles for designing new recommendation system in tourism context.

Anticipated results

The goal of this study is to develop a better understanding of traveller' on-site behaviour where it is assumed that traveller's adaptive process enables travellers

to change their trip plan. Thus, it is hoped that this study provides the foundation for better understanding the dynamic processes that reflects complex trip behaviour at the destination. From a practical perspective, the results of this study will enable DMOs and tourism companies to better address the needs of traveller at a destination. This study would also help tourism distribution intermediaries (e.g. online travel agency, Tripadvisor) to understand what motivates traveller to behave differently than their original plans and to improve the efficiency of their recommendation systems.

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A proposal for evaluating the tourist user experience with gestural interfaces

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Abstract

Ongoing progress in communication and information technologies has encouraged new and innovative approaches for their use in the tourism sector. This reality has also been met by multidimensional shifts in the tourists' behaviour, which have gradually become immersed in an almost ubiquitous participatory web culture scenario with personalized access to information during the entire cycle of the touristic experience. New human-computer interaction paradigms - such as natural user interfaces (NUI) - have led to challenges and opportunities in usability and user experience. When integrated into the tourism experience, gestural interfaces may enable and enhance information sharing and manipulation, thus adding a new dimension to how we experience tourism. The current research proposal expects to reach some understanding, through the exploration of the theoretical framework and the chosen methodology, about the challenges raised by NUI within current tourism trends. In order to experiment with the concepts dealt with and researched on, a specific attention will be given to interactive walls that support touch-free gestural interaction, in order to identify and comprehend their impact on both the tourism experience and the user experience.

Problem definition

Current trends in tourism are influenced by the close proximity with information and communication technology related developments. Thus, it may be said that technological progress transformed tourism in a global way (Buhalis & Law, 2008). Tourists have changed their behaviour and technology progresses conveyed new services and applications. *Travel 2.0* applications (Miguéns, Baggio, & Costa, 2008) enable tourists to search, select, create and share information, contributing to the dissemination of their experiences in a collaborative approach. The present study aims to explore the new pro-active tourists and their relation with new interaction paradigms and new interfaces – the Natural User Interfaces (NUI). The NUI, also known as gestural interfaces, consists in “an emerging computer interaction methodology which focuses on

human abilities such as touch, vision, voice, motion and higher cognitive functions such as expression, perception and recall” (NUIGroup, 2012). Yeoman (2012) identifies gestural interfaces as one of the future technology drivers in tourism, emphasizing that the detection of the user's movement without physical contact with the display, as typified by the use of Microsoft Kinect¹, will allow a natural interaction with information, different from traditional paradigms. Today it is possible to design interactive solutions that enable exploitation and manipulation of information for tourists, using only gestures. However, no research was found addressing the applications and implications of the use of free-form gestural interfaces in tourist services or applications. Therefore, this study will address the dimensions related to the proactive tourists' behaviour, reflecting the dynamics of Web 2.0 and the new paradigms of human-computer interaction, with a focus on interfaces used to explore information by tourists through gestures. Addressing the described research problem and goals, the following research question was defined: “During a visit to a destination, in what ways may the use of NUI, with support of free-form gestural interaction, influence the tourist experience?” Additionally, five research hypotheses were outlined: h1) The tourists feel motivated to share their tourism experience when using a NUI supporting free-form gestural interaction; h2) during the trip, the use of NUI, supporting free-form gestural interaction, is a valuable asset for the diffusion of tourism related information; h3) The use of NUI, with gestural interaction, in a public space is perceived as a threat to the tourist's privacy; h4) The communication of the tourist's experiences using NUI, during the trip, is influenced by the tourist's profile as a user; h5) The tourist's user experience is enriched by the use of NUI with support of free-form gestural interaction.

Literature review

Tourist 2.0, media convergence and participatory culture

Social media has an important role in a tourist experience, for they: allow access to more information sources; stimulate the feeling of belonging to a virtual tourist community; and they also promote the storytelling that happens after the trip (Fotis, Buhalis, & Rossides, 2012). According to Milano, Baggio, and Piattelli (2011), tourists find in Travel 2.0 services an information source that can be used and influence the three main stages in the tourist experience: i) the before phase of the trip, the planning moment when they read experiences shared by other

¹ Microsoft Kinect (Borenstein, 2012), as a motion sensing device, allows the detection of body movements and facial recognition, allowing the manipulation of information with body gestures and the development of NUI, where the body is the only input device.

tourists; ii) the *during phase* of the trip, where they can share information in real time; iii) and the *after phase* of the trip, when they return home and can share reviews, photos and comments. This study aims to explore the use of a platform that allows the consumption of UGC during the trip, mediated by an interactive surface. Media convergence (Jenkins, 2004) represents a paradigm shift in technology, industries, markets, genres and audiences, as content flows along an intertwined network of different platforms and audiences. Audiences can contribute to change and enrich this flow, as they create new content and connections between content. Månsson (2011) defines the concept of mediated tourism, as tourists are influenced by media representations in a convergent way, contributing with new content. The consumption, production and sharing of content performed by tourists in a collaborative approach can be identified with the notion of participatory culture presented by Jenkins (2009). In this context, Neuhofer, Buhalis, and Ladkin (2012) identify two major changes in the perception of the paradigm inherent to the tourist experience. The first change is related to a transformation in tourists/consumers, leaving a passive behaviour to turn into co-creators of their own experiences. In addition, Neuhofer et al. (2012) identify another paradigm shift related to the increasing technological mediation of the tourist experience.

Gestural interfaces and tourism

NUI, also known as gestural interfaces (Saffer, 2008) can include different interaction paradigms. For the purpose of this study, the paradigm focused on will be free-form gestural interaction, where the sensor detects the user's body movements allowing a natural control of games and applications, without the need of an extra input device (mouse, game controller, etc.). Microsoft Kinect, a motion sensing device, supported the development of diverse applications using gestural interaction (Giovannella, Iosue, Moggio, Rinaldi, & Schiattarella, 2013). Moreover, new challenges and threats to usability and user experience are brought up by this specific interaction paradigm (Norman & Nielsen, 2010). Finally, no commercial solutions for gestural tourist services were found until now, and no studies were found on how those services would have implications in the tourists' user experience. Nevertheless, some prototype examples were identified. Giovannella et al. (2013) developed a prototype with Kinect integrated in a larger project that aims to develop an infrastructure to support active learning experiences during tourist explorations of a territory. GFI² created a solution³ to

² <http://www.gfi.pt/en/> [Oct. 5, 2013]

³ <https://www.youtube.com/watch?v=8jqHGYvVPaM> [Oct. 5, 2013]

allow the navigation on Google Street View maps with gestures. BlablabLAB⁴ developed a proposal called Be Your Own Souvenir⁵, which allows tourists to create a 3D replica of themselves. The project “mesh-t: Pervasive Tourism”⁶, developed a prototype of an interactive surface that supports free-form gestural interaction, with the inclusion of Microsoft Kinect. Finally, COVII, with the WiiMotion technology, developed an interactive wall⁷, which is part of the Porto Cález wine cellars guided tour, allowing tour guides to freely manipulate contents through gestures, during the visit.

Conceptual development

The thesis’ operational methodology comprehends three main phases. The first phase – literature review and exploratory consideration of the problem – aims to outline the state of the art and addresses the problem and the methodology explanation. It also includes the preparation and execution of exploratory interviews. The second phase – data collection – includes the sampling selection, the elaboration of the data collecting instruments (two questionnaires and an observation check list), the administration of these instruments before, during, and after the utilization of a free-form gestural interface by tourists and the compilation of the collected data. Finally, the third phase – data analysis and conclusions – will comprise the data analysis and the interpretation of the achieved results, which will allow the hypotheses discussion and validation, and the statement of the study’s main contributions and results.

Proposed methodology

The methodological approach may be understood as a mixed-method methodology (Fraenkel, Wallen, & Hyun, 2012), combining both quantitative and qualitative procedures and techniques. In the first phase, initiated with the literature review summarized in section 2, the study has an exploratory nature, and includes the application of exploratory interviews (Fraenkel et al., 2012) to experts and academics in the tourism field. Those interviews will emphasize the perception of the importance and potential of novel interaction models in tourism, and especially the integration of NUI/free-form gestural interfaces in tourism. The analysis of the qualitative data from the interviews will contribute to the definition of appropriate variables to be considered in the preparation of a second data collection phase. The purpose of the second data collection phase is to

⁴ <http://www.blablablab.org> [Oct. 5, 2013]

⁵ <http://vimeo.com/21676294> [Oct. 5, 2013]

⁶ <https://www.facebook.com/mesht.pt> [Oct. 5, 2013]

⁷ <http://vimeo.com/26278641> [Oct. 5, 2013]

perform an in-context evaluation with real tourists when using a real interactive surface⁸ integrated in a tourist destination. As stated by Szymczak et al. (2012), the human context in which an application or device is used can impact on the user experience; therefore, they present an in-context evaluation of an audio tactile interactive tourist guide. In the second data collection phase, firstly, a random sample of tourists will be chosen and submitted to a questionnaire before their experience with the interactive surface. This inquiry moment aims to: define the tourist profile in what encompasses social media use and travel 2.0 apps and their perceived motivation and expectations on using a free-form gestural interface as a tourist service in the destination. After the experimentation moment, a post-experience questionnaire will be distributed to the participants, inquiring on the user experience of the wall. The resulting collected data of the questionnaires will have a quantitative nature, which will be combined with qualitative data obtained by the non-participant observation (Fraenkel et al., 2012) that will occur during the test.

Anticipated Results

The main goal of the present research proposal is to understand the impact of integrating gestural interfaces in a tourist experience and context. Through the exploratory interviews, the exploration on how the experts and academics in the tourist field perceive the relation between the identified novel interaction methods and the tourist user experience will be achieved. As the study will include tourists as participants, using a real interactive free-form gestural interface for consumption and manipulation of touristic information, it will be possible to identify if the use of this interface will have a positive influence in their user experience, in what includes more explicitly: a) their communication of the touristic experience; b) their motivation for using this artefact; c) the influence in the processes of sharing and consuming information; d) the potential privacy issues raised by interacting with the NUI in a public environment. As an outcome, it will also be possible to identify a set of recommendations to support and guide the development and construction of interactive surfaces supporting free-form gestural interaction in touristic contexts with a particular focus on efficiency, effectiveness and user satisfaction. Finally, the user experience evaluation methodology developed will contribute to address the lack of established evaluation methods and guidelines to apply in the development of interactive surfaces supporting free-form interaction in tourism.

⁸ Currently, contacts with Porto Cálem wine cellars are being made to assess the possibility of using their interactive surface in the in-context evaluation with real tourists.

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Food, tourism and urban economic development: A role for ICT?

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Abstract

Information and communication technologies (ICT) play an essential role in developing sustainable tourism industries and can enhance the consumption of local food in urban settings. Although the rise of culinary tourism and the demand for more participatory experiences offer the opportunity to strengthen linkages between tourism and local food, such developments cannot occur without effective partnerships and dissemination of information. The purpose of this research is to explore how food and tourism can be better linked through the use of ICT so the periphery of urban places can also benefit as a destination. This research will adopt a case study approach and mixed-research methods to evaluate the use and potential of ICT for developing food tourism in urban settings. The findings of this research will suggest approaches to enhance stakeholder communication, information dissemination and economic performance in the tourism industry.

Problem definition/Literature review

Urban tourism has the potential to be a generator of income and employment and a promoter of social development through its impact on employment creation and income redistribution in a city (Evrin, 2012, Timur & Getz, 2009). As a yield-driven strategy is becoming a central issue in tourism development, policy makers have started to develop strategies that play a crucial role in raising the tourism profile of cities (Simmons, Becken, Cullen, 2013; Timur & Getz, 2009). Visitors with higher willingness to expend can stay longer and visit peripheral metropolitan areas, overcoming some of the challenges that urban tourism presents: protection of the environment, conservation of heritage and cultural values as well as maintenance of a desired quality of life for residents (Valls,

Banchini, Martinez, & Tuñon, 2013; Timur & Getz, 2009). Strategies to enhance linkages and incorporate local suppliers into tourism value chains is one of the most useful ways in which tourism businesses can contribute to a yield-driven strategy and create urban economic development (Rogerson, 2013). One of the sectors with largest potential in enhancing tourism benefits and increase the impact of visitors' expenditure into the host economy is the local food sector (Pratt, 2012).

Food is an essential component of and critical resource for the tourism industry (Berno, 2011; Henderson, 2009). For tourists, food is much more than physical sustenance and nourishment: it is also a way to experience the culture of a country and its people, and therefore, an increasingly important tourist attraction (Richards, 2013; Kim, 2009). Dining in restaurants is described as the most frequent leisure activity of tourists and represents their second largest daily expenditure (Berno, 2011; Harrington & Ottenbacher, 2010). The consumption of food in tourism has therefore significant implications for the host residents. Direct impacts accrued from initial tourist spending in the tourism industry, such as hotel accommodation and restaurants, are essential to generate income and employment (Milne, 2013 & Lejarra & Walkenhorst, 2010). Indirect impacts generated when tourists' expenditure impacts on the non-tourist economy through purchases of food and services, for example food sales to restaurants, are vital to spread tourism benefits and generate economic growth (Milne, 2013 & Lejarra & Walkenhorst, 2010). Also, if the tourist industry wishes to reduce its carbon footprint, 'buying local' 'greener' than transporting food across the globe (Sims, 2009). Although local food experiences provide an excellent opportunity for destinations to both increase economic yield per visitor and to also enhance the attractiveness of the tourism product, such developments cannot occur without effective partnerships and dissemination of information (Richards, 2013; Deuchar, 2012).

ICT is a powerful driver to grow food tourism and has the potential to build a yield-based tourism industry (Surenkok, Baggio, & Corigliano, 2010; Deuchar, 2012). For example, the content of tourism websites plays an essential role in enhancing linkages between tourism and local food in destinations (Singh, Milne, & Hull, 2012). Tourism websites have the potential to assist visitors in planning

their trip and developing their opportunities for exposure to local food and cuisine (Horng & Tsai, 2010). Information disseminated to visitors before they arrive at their destination is vital in shaping their expenditure (Milne, 2009). Through up-to-date information on websites, tourism organisations and businesses will significantly influence the formation of a positive destination image as well as the type of visitor (Jeong et al., 2012).

ICT can integrate tourism businesses, customers and communities by facilitating the flow of information between multiple parties and stimulating relationships (Milne, 2013; Buhalis & Minghetti, 2010). Linking tourism websites to local producers' websites can enhance communication, increase social networks and build collaboration between tourism operators, visitors and local growers. Strengthening networks and communications between tourism businesses and other economic sectors, such as the local food sector, is vital to allow the benefits of tourism to spread throughout the local economy (Milne, Clark, Speidel, Nodder, & Dobbin, 2009). For example, a local hotel's website may include a menu that is linked to a local producer's website, which provides information about local food availability and seasonality (Singh, 2012; Milne et al., 2009).

Despite the potential of ICT in enhancing experiences (Neuhofer, Buhalis, & Ladkin, 2013) and developing sustainable tourism industries (Milne et al., 2009; Touray & Jung, 2010), little research has been carried out in exploring its role as facilitator of food tourism. Numerous studies state that ICT, particularly tourism websites, are an essential marketing tool for promoting food tourism, however they highlight that food is still presented as a supportive tourist attraction (Kim, 2009; Huang, 2009). There is a lack of understanding of the use and potential role of the ICT in enhancing links between tourism and the local food sector in destinations (Londono Leal, 2011; Garcia-Gonzalez, 2013). The purpose of this research is to explore how food and tourism can be better linked through the use of ICT so the periphery of urban places can also benefit as a destination. Therefore, this research will explore processes that underpin relationships between food and tourism and the stakeholders within them in urban settings and, how the use of ICT stimulates the formation of and nurture such relationships. This research aims to offer an integrated perspective, including supply, demand

and governance side, on how food tourism in urban settings may be fostered by the use of ICT.

The findings of this research will suggest approaches to enhance stakeholder communication, information dissemination and economic performance in the tourism industry. New insights into the use of ICT to develop food tourism will influence decision making in planning strategies and policies oriented to the development of the industry. Understanding how to make local food more accessible as an attraction in metropolitan areas will not only be beneficial to the tourism industry and local government agencies in their efforts to promote their regions and raise destination image profile, also, to other businesses and the broader community which will be able to benefit from an increased visitor expenditure.

Potential methodology and methods

This research will adopt a case study approach and mixed-research methods to evaluate the use and potential of ICT for developing food tourism in urban settings. A case study approach provides flexibility in the use of various data collection methods and it can be used in practically any kind of social setting (Singh et al., 2012). A comparative case study between two urban tourism settings (Auckland and Barcelona) will be conducted with the aim to look for similarities, differences and particularly to broaden the understanding of the topic for study (Christensen, Johnson, & Turner, 2011). While a study of a single destination is instructive, a comparison of two cities with varying characteristics and different contexts (environmental, cultural, political and social) yields more understanding to the study (Matthews & Ross, 2011; Timur & Getz, 2009).

Both Auckland and Barcelona are considered “gateway” cities in two countries where tourism is a key industry and a main export earner. As gateways cities they both are seen as major entry/exit points into or out of a national or regional system or a particular point along a route from one destination to another (Lohmann & Pearce, 2011). Gateway cities have the potential to attract tourists to their peripheral urban areas so tourism benefits are spread, reducing tourism impact (Valls et al., 2013). The researcher has a personal interest in both cities as

she has lived in both of them for an extended period of time, and therefore, is able to look at the topic 'through different eyes' (Lohmann & Pearce, 2011).

Data collection and analysis will involve the use of quantitative and qualitative research methods. Quantitative research methods will involve the use of web-based surveys to international visitors to understand their preferences on food experiences and the role of ICT in influencing their decisions in participating in different food experiences. Web-based surveys have high validity and contain fewer random and systematic errors because respondents lacking sufficient time to process all questions can place them in the long-term memory and access the last response at a later time (Singh et al., 2012). Qualitative research methods will involve the development of semi-structured interviews with tourism operators, local producers and an expert group to understand potential culinary partnerships and their use of ICT. An audit of tourism websites will be conducted to identify strengths and weaknesses in developing a destination image to attract the 'high yield visitor'.

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The Technology Enhanced Tourist Experience

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Abstract

The creation of rich and memorable experiences represents a key concept in tourism research and practice. Currently experiences are undergoing a drastic change as increasing consumer empowerment and technology use are the driving forces revolutionising the nature of tourist experiences. While existing research recognises this impact, a holistic re-definition of the tourist experience is missing. This doctoral study therefore has the aim to amalgamate this two-fold paradigm shift to introduce, conceptualise and empirically explore the holistic concept of the Technology Enhanced Tourist Experience. In adopting a qualitative in-depth enquiry, this study makes a three-fold contribution, by a) conceptualising a new type of tourist experience, b) unifying tourist experience constructs, co-creation theory and ICTs within one framework and c) developing a new theoretical model that reveals processes and factors determining the Technology Enhanced Tourist Experience.

Problem Definition

Tourism is gradually being transformed to a new sphere of competitiveness globally. The creation of unique, meaningful and memorable experiences for consumers has been postulated as the key to generate added consumer value and competitive advantage. Currently, two major forces are however fundamentally transforming our understanding of how tourist experiences can be created. First, the until recently dominant experience economy has been advanced by the idea of co-creation which recognises active and empowered consumers in the co-creation of their own experiences (Prahalad & Ramaswamy, 2004). Second, the proliferation of information and communication technologies (ICTs) has implied that tourist experiences are not only co-created but technology-mediated (Tussyadiah & Fesenmaier, 2009). Recent studies argue that ICTs will support new types of activities that will not only change existing, but eventually lead to new types of tourist experiences (Gretzel & Jamal, 2009). Thus, with the dynamics of empowered consumers and emerging technologies, traditional roles, structures and processes of tourist experiences have changed. This means that existing conceptualisations, categories and components do no longer apply with technology in place (Gretzel & Jamal, 2009). While a number of recent studies (Tussyadiah & Fesenmaier, 2009; Tussyadiah & Zach, 2011; Wang, Park & Fesenmaier, 2012; Wang, Park & Fesenmaier, 2013) have acknowledged this

change, explored mobile technologies or single stages within the tourist experience, empirical research holistically revisiting tourist experiences remains limited. This doctoral study therefore raises the need to apply a more holistic perspective to develop a theoretical and practical understanding of Technology Enhanced Tourist Experiences.

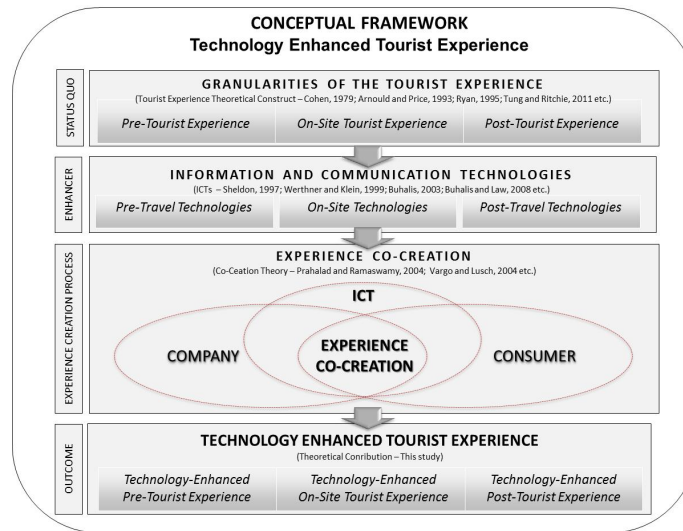
Literature Review

Consumers are increasingly striving for experiences today. As products and services have become interchangeable and replicated, the search for unique, compelling and memorable experiences in the context of tourism consumption has become a key notion (Morgan, Lugosi & Ritchie, 2010). In the 1990s, Pine and Gilmore (1999) pioneered in coining the renowned term of the experience economy. In a market of increased global competition, companies could only gain competitive advantage by providing consumers with compelling experiences (Morgan et al., 2010). While the concept of the experience economy has long provided a valuable vehicle to design, stage and deliver experiences and gain competitive advantage, these views have become increasingly challenged (Prahalad & Ramaswamy, 2004). With a radical shift in the company-consumer power relationship taking place, the mainly company-centric driven idea of staging experiences has been challenged by the principles of experience co-creation. These suggest that companies rather need to recognise the consumer as an individual who is active and powerful in co-creating his/her own experiences in quest for personal growth (Prahalad & Ramaswamy, 2004). In addition to co-creation, a second major factor appears to impact upon experiences, namely technology. The proliferation of ICTs has not only had an influence on society and people's everyday lives (Crouch & Desforges, 2003), but has caused fundamental impacts by transforming the nature of how experiences are created (Crouch & Desforges, 2003; Stamboulis & Skayannis, 2003). This is reinforced by Gretzel, Fesenmaier and O'Leary (2006) who attribute technologies a major role in supporting consumers throughout all stages of the experience, for preliminary information search, decision making, travel planning, communication, retrieval of information and post-sharing of experiences at home. In this process, technologies, such as websites, blogs, recommendation systems, virtual communities, social networking sites or mobile devices are implemented to facilitate travel activities and support the tourist experience (Gretzel et al., 2006). With these dynamics, the traditional understanding of experience creation has changed and hence needs to be raised to question.

Conceptual Developments

Despite the amount of literature acknowledging this impact (e.g. Prahalad & Ramaswamy, 2004; Binkhorst & Den Dekker, 2009; Ramaswamy, 2009), conceptualisations and empirical research only exist to an insufficient extent. As a result, the need to recognise these latest advances of experience co-creation (Prahalad & Ramaswamy, 2004) and the implementation of ICTs within the tourist experience (Tussyadiah & Fesenmaier, 2007; Darmer & Sundbo, 2008; Gretzel & Jamal, 2009; Tussyadiah & Fesenmaier, 2009) provides the underlying rationale for this study to revisit and advance the theoretical framework of the tourist experience. Upon this rationale, this study has the overall aim to explore *how tourist experiences can be enhanced by ICTs through consumer-company experience co-creation throughout all stages, i.e. pre/during/post phases, of the travel process*. Thereby, this study addresses a major gap by amalgamating three elements, including the tourist experience, ICTs as catalyst of change, and the experience co-creation process into one study. In doing so, the study contributes by developing a conceptual framework that graphically depicts the process that leads from our current understanding to the new theoretical contribution of this doctoral study. The conceptual process framework explains this process by first understanding the tourist experience with its granular components (*status quo*). It then goes on to introduce ICTs as the catalyst of change (*enhancer*) which transforms the conventional tourist experience. This leads to a changed experience creation process (*process*) in which companies and consumers conjointly use ICTs to co-create enhanced tourist experiences. Finally, this leads to the new understanding of a *Technology Enhanced Tourist Experience* as the new theoretical contribution (*outcome*) of this study.

Figure 1 Conceptual Framework



Methodological Approach

Considering the high level of complexity in researching the tourist experience, a consensus of suggested methodological approaches is missing (Sharpley & Stone, 2010). In order to capture its whole complexity and build an integrated understanding of Technology Enhanced Tourist Experiences, a *qualitative sequential mixed methods design*, a novel methodology introduced by Morse (2010) is adopted. While mixed methods are commonly associated with the combination of both qualitative and quantitative methods, Morse (2010, p. 340) advocates that this definition is not restricted to a mixture of inquiries but is applicable to any research that includes “different types of data, approaches to analysis, or research conducted on two different populations or groups, whether it be qualitative or quantitative”. Being in line with the advocacy for more innovative and imaginative blends of methods in contemporary mixed methods research (Teddle & Tashakkori, 2012), this study employs a qualitative mixed methods design, comprising an initial *qual* component to understand the experience basis, followed by two core *QUAL* phases to understand both

company and consumer perspectives of the Technology Enhanced Tourist Experience.

This study has started with *Phase 1* by conducting a content analysis of peer-reviewed full-length journal articles to elicit the core components, i.e. the granularities that constitute the tourist experience. In *Phase 2*, a case study approach was adopted with the aim to develop an understanding of how the tourist experience is co-created and enhanced through technology from a *company perspective*. In using multiple sources of evidence, including documentary material, interviews and observation, best-practice companies currently realising technology enhanced experiences were investigated. In *Phase 3*, semi-structured in-depth interviews with technology-savvy consumers, having experienced technology enhanced experiences, were conducted with the aim to explore how experiences and value are constructed in a Technology Enhanced Tourist Experience from a *consumer perspective*. The three-dimensional combination of these sequential qualitative methods allowed for rich qualitative data, triangulation of the findings and a profound understanding of the full complexity of the subject under investigation.

Results and Findings

This doctoral study makes a number of critical contributions on both a theoretical and managerial level. Essentially, this study will determine what a tourist experience is and how this is being constructed, before exploring how technology can enhance these experiences. For theory, this study makes a three-fold contribution by a) revising the traditional understanding of the tourist experience theory, b) amalgamating the hitherto separated theoretical streams of tourist experience, co-creation and technology theories into one holistic framework and c) developing a new holistic theoretical framework that depicts the inherent processes and success factors that need to be fulfilled to create a Technology Enhanced Tourist Experience. In the core of the analysis, the findings suggest that technology-enhanced experiences are characterised by the factors of *instantaneousness* and *real time*, constant *social interconnectedness*, consumer *independence* and *control*, a sense of *experimentation* and *playfulness*, *information intensity*, *territorial discovery* and *serendipity* at the same time.

Besides this highly relevant contribution to tourism marketing and management literature, this study contributes to tourism practice by applying this knowledge for a better understanding of the changed implications for the creation and management of experiences. It will provide the necessary best practice examples, new models, and paradigms for achieving that. This knowledge will effectively

enable tourism organisations around the world to understand a) how and where technology needs to be implemented before, during and after the tourists arrive at the destination, b) how technology enables more engaging co-creation encounters and c) what overall factors need to be fulfilled to create dynamic and competitive technology-enhanced experiences in the future in the right place and at the right time.

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The role of social media in facilitating the interactions of conference attendees: A case study.

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Abstract

This study examines the features of social media in serving the expectations of attendees during conference. A conceptual framework that consist of the main features of social media and attendees expectations are proposed, based on which semi-structure questions are constructed for focus group interview. The anticipated findings will be the roles of social media in facilitating the interaction of conference attendees.

1. Problem definition

There are numerous studies being carried out in the field of convention industry mostly focusing on investigating and understanding the site selection criteria for convention destinations (Crouch & Richie 1998), and perceptions of meeting planners/attendees towards convention destinations and destination image (Baloglu & Love 2005). This reveals the trend of studying and effectively responding to the perceptions and evaluations of the major convention parties (meeting planners, associations and attendees). It draws research attention in this paper to further explore the relationship between the conference participants' experience and the use of social media in conference organization

In the MICE industry, studies have identified different participation decision making process and different attendees profiles (Yoo & Chon 2008). In particular, the conference attendees have a variety of motivations for conference participation. The conference attendees' were believed to be more appropriate as opposed to the corporate attendees to be used as a model to study the behaviour and intentions of delegates attending the conferences, due to its voluntary nature (Leach, Liu & Winsor 2008). According to Servet et al (2006), activities and opportunities, networking, convenience of conference, education benefits and

products and deals are the motivations to a regional conference. Also career enhancement, travelling to desirable locations and social aspects are reported by number of researchers (Opperman & Chon 1995; Rittichainuwat; Severt et al 2007; Yoo & Chon 2008). In the UK context, personal/professional development, cost, location, time, networking, wellbeing, convenience are claimed to be the main motivation factors for conference participation (Mair & Thompson 2011). Social media is developing fast in the recent years and it brings strong influences to the convention industry (Lee 2011). In the convention industry, social media has been taken as part of conference functions (Lee 2011). This may be due to their unique features such as to disseminate information, to stimulate and articulate social networking and interactions among the attendees as well as it enables two way communications between the organisation and the attendees (Cheung, Chiu & Lee 2011). These features are exactly suited to serve the attendees' motivations as discussed earlier. The aim of this study is therefore to investigate the roles of social media in facilitating the convention meetings to meet the motivations of attendees. The objectives of this study are to 1) find out what motivate people to attend conferences, 2) investigate how social media such as Twitter and Facebook facilitate conferences to satisfy the expectations of attendees. The findings generated from this study are helpful for the practitioners and management to understand attendee's evaluation of the various and sometimes complex dimensions of the conference, when facilitated by social media. Also the results could be of great value to the industry and meeting planners in the management of conferences and attracting high attendance rate.

2. Literature review

Yoo and Chon (2008), have developed a measurement scale to measure the convention participation decision making, they have achieved a five-factor scale which are destination stimuli, networking opportunities, educational opportunities, safety and health situation and travel ability. Mair (2010) has categorized the attendees according to their motivations based on four motivation components, travel ability, networking and professional development, cost and location and employment. The findings showed that female attendees rate the personal safety and destination accessibility higher than male attendees. Moreover, younger age

group (18-24) rated the professional development opportunities high, while attendees aged from 45 to 54 rated social networking opportunities higher than other age groups. In addition, attendees with higher education levels tended to scale a high importance to professional networking and development. However, there has been a lack of studies investigating the interpersonal communication factors or communication pattern of attendees during the conference. Social media is defined as the development of technological foundations of Web 2.0 that created a group of internet based applications (Kaplan & Haenlein 2010) which enriches the interaction and experience by allowing users to edit, post and view information online (Cormode & Krishnamurthy 2008), this resulted in the uprising and popularity of social media channels like LinkedIn, Facebook and Twitter. The term social media is consistent with social networking, social websites, and social technologies (Lee 2011). Social media changes the paradigm of meeting industry from traditional meeting/old style meeting to more interactive meeting (Palmer 2010). As impersonal communications is increasingly important for a conference, the most frequently used tools such as e-mail; internet broadcasting and video conferencing fail to provide a two way communication (Weber & Lakin 2004). The main types of social media include blogs/micro blogs, social networking sites (SNSs), collaborative projects, and feedback sites (Chan & Guillet 2011). Facebook and Twitter are the SNSs and Micro blogs. In the convention industry, Facebook and Twitter emerged as the most popular and widely accepted social media applications compared to others, supported by the trends that many associations create online community and excitement through Facebook pages for their conferences (Ball, 2010). Twitter is adopted by meeting planners to categorise the conference-related posts through “back channel” for the attendees to quickly locate the post. Moreover, meeting planners use Twitter as an interpersonal communication tool to encourage live interactions among the attendees during speaker sessions to express their opinions (Lewis 2010).

3. Conceptual framework

After an extensive review of the literature, the role of social media in achieving attendee’s motivation factor remained an unexplored area. A conceptual framework is proposed to bridge the literature gap. The researcher believes the

functions of social media can facilitate the conference to meet motivation factors that attendees seek during the conference (Table 1). The researcher identified dissemination of information about the conference, interaction among attendees, networking opportunities, and instant/live communication as the main functions of social media after reviewing the literature (Cassidy 2006). The motivation factors include career-enhancement, education, professional/networking opportunities and professional development (Mair & Thompson 2011). Each of the functions of the social media is believed to be able facilitating or corresponding to most or all of the motivational factors. If motivations are met through the facilitation of social media features it will leads to satisfactory or pleasant experiences with the conference. The framework will assist the methodology in particular the construction of questions for interview to investigate the relationship between the social media's functions and attendee's motivation factors at the conference.

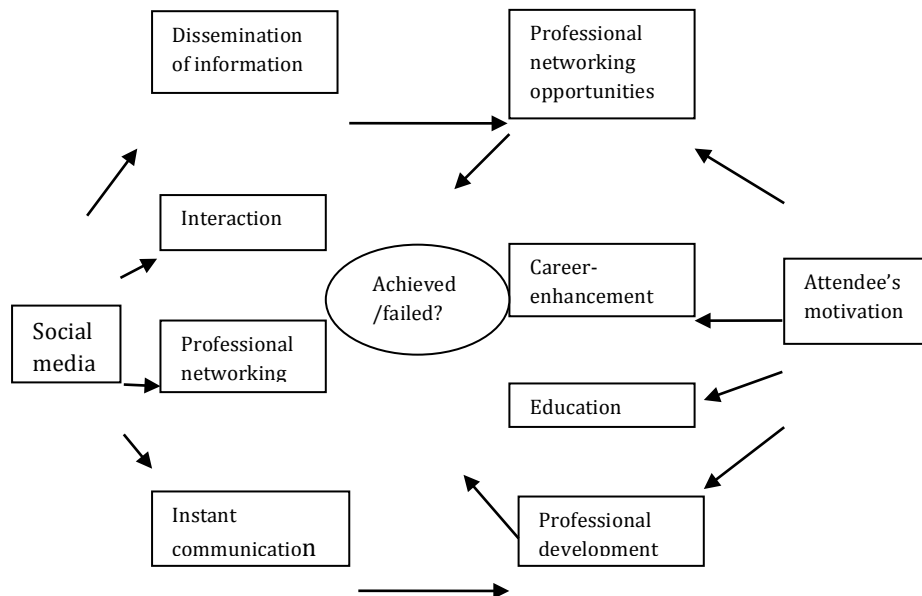


Figure 1. Conceptual framework of relationship between social media features and attendee's motivations

4. Methodology

4.1 Research design

This study is a qualitative case study of the IFITT 2014 conference investigating the social media usages and impacts during conference in meeting attendee's expectations. The reason to choose the IFITT conferences is mainly due to the compatibility of the theme of the conference and the association with the topic and objectives of the study. As the purpose of this study focus on understanding and exploring the relationship between the features of social media and attendee's expectations, using a qualitative approach will allow researcher to dig into the relationship through using a variety of data sources. It will reveal more dimensional results of the relationship rather than numerical indications from quantitative approaches.

4.2 Participants & data collection

In this study, several focus group interviews will be conducted to collect the data. The participants in this case will be recruited in the conference. This is because these participants will have the most appropriate knowledge about the study area (Burrows & Kendall, 1997), and therefore the findings can generate better applicability. The main questions for the interview will be "how do you find yourself in interacting with other attendees in Twitter and Facebook? Is it through instant communication or how?" and "How do you find Twitter and Facebook in developing your social networks?"

4.3 Data analysis

This study will adopt content analysis to interpret the findings. As it is best suited for the data collected from the focus group interview, it will allow researcher to classify the answers into content related categories, therefore in the same category, words and phrases are believed to tell the same meaning (Cavanagh 1997). A deductive approach is conducted based on the framework proposed earlier and

also to test the relationship described in the model (Kyngas & Vanhanen, 1999). It analyses the content from the general to the specific (Burns & Grove 2005).

5. Anticipated results

The results will demonstrate the positive interrelationship between the features of social media and attendee's motivation. The features will help the attendee's to achieve their main motivation factors at the conference in one way or another. However, there might be negative interrelationship which may result from the difference perception of use of social media among different age groups and professionals.

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The Impact of Users’ “Online Reviews” and “Ratings” on Consumers’ Behaviour toward Hotel Selection Factors

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Abstract

With the advent of Web 2.0 and rapid growth of Tourism 2.0 applications, today internet stores millions of online reviews and user ratings about nearly every lodging facility around the world. Annually millions of travellers consult these reviews and check the ratings to select hotels. Currently hotel review websites (i.e. tripadvisor.com) are among the most visited websites in internet and many of hotel online booking websites (i.e. booking.com) allow users to post online reviews about the hotels they have booked. On the other hand considering the high costs of investment in hotel industry, the hotel selection behaviour of consumers has always been an attractive and relevant subject for tourism marketing studies. This study seeks to understand how this enormous volume of eWOM affects the behaviour of contemporary tourists toward hotel selection factors.

Problem Definition

Following the development of Web 2.0 applications, users have a significant opportunity to share knowledge (Gruber, 2008), opinions and product information (Gupta & Harris, 2010) online. This has a growing impact on tourism promotion, marketing and sales (Buhalis & Jun, 2011) and enables two-way information communication between the tourism industry and consumers. Therefore an enormous number of online user-generated content on hotels has been posted (Siagala, 2009; Ye, Law, Gu, & Chen, 2011) which are electronic forms of word-of-mouth (eWOM) (Dickinger & Mazanec, 2008). For over fifty years, Word-Of-Mouth (WOM) has been an important research topic in the marketing literature (Martin & Lueg, 2011). Now research on eWOM as compared to traditional WOM is even more visible and accessible (Breazeale, 2009; Godes & Myazlin, 2004; Phelps, Lewis, Lynne, Perry, & Raman, 2004).

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Hotel selection attributes, due to the high costs and enormous investments in the hotel industry, are one of the most important areas of hospitality research (Dolnicar & Otter, 2003) and have been always a matter of concern for stakeholders (Li, Law, Vu, & Rong, 2012; Lockyer, 2005a; Matilla & O'Neill, 2003). Therefore they have been extensively studied (Callan, 1995; Chu & Choi, 2000; Clow, Garretson, & Kurtz, 1995; Dolnicar, 2002; Tanford, Raab, & Kim, 2012). However there are a number of methodological limitations in much of this literature (Jones & Chen, 2011). They are very heterogeneous in terms of: the hotel characteristics, the methodology, and the fundamental concepts underlying the definition of “important hotel attributes” (Dolnicar & Otter, 2003). Thus it is necessary to develop an insightful understanding of consumers hotel selection process and to find out how the hotel selection factors interact with travellers’ preferences (Li et al., 2012).

Among the most important limitations are confusions between satisfaction and decision making factors (Jones & Chen, 2011). The attributes which consumers *want* are not necessarily identical with what they *consider* when they select a hotel. This can be due to at least two different important facts: the effect of trade-offs (Dolnicar & Otter, 2003), and that customers may not generally have any information about the factor before staying at a hotel (Jones & Chen, 2011). There is also a distinction between the salient attributes and determinant attributes (Jones & Chen, 2011; Lewis, 1984) as Dev, Morgan, and Shoemaker (1995) suggest that researchers should distinguish between attributes that actually cause a purchase from those that are top of the mind but may not actually distinguish the hotel (Jones & Chen, 2011).

Despite of numerous attempts to investigate the role of eWOM in tourism and hospitality on one hand, and hotel selection factors on the other, only limited work has been done to study the effect of online reviews and ratings on consumers’ behaviour toward hotel selection factors.

Literature Review

Many researchers have tried to study the choice decisions of lodging property consumers (i.e. Ananth, DeMicco, Moreo, & Howey, 1992; Cadotte & Turgeon, 1988; Callan, 1998; Chu & Choi, 2000; Clow et al., 1995; Dickinger & Mazanec,

2008; Dolnicar, 2002; Dolnicar & Otter, 2003; Dube & Renaghan, 2000; Griffin, Shea, & Weaver, 1997; Jones & Chen, 2011; Knutson, 1988; Lewis, 1984; Li et al., 2012; Lockyer, 2005a; Matilla & O'Neill, 2003; McCleary, Weaver, & Hutchinson, 1993; Sohrabi, Vanani, Tahmasebipour, & Fazli, 2012; Stringam, Gerdes Jr, & Vanleeuwen, 2010; Tanford et al., 2012). Most of these researchers have tried to study the selection factors which affect consumers' choice intentions. However there are a number of methodological limitations in much of this literature (Jones & Chen, 2011).

Dolnicar and Otter (2003) reviewed 21 studies between 1984 and 2000 and found 171 attributes used in those studies. Some of them such as services, marketing, area, location, room size, cleanliness, room rate, security, service quality, star rating and the reputation of the hotel are reported by most scholars to be important in decision making. (Ananth et al., 1992; Atkinson, 1988; Barsky & Labagh, 1992; Cadotte & Turgeon, 1988; Chu & Choi, 2000; Dickinger & Mazanec, 2008; Hsieh, Lin, & Lin, 2008; Knutson, 1988; Kuo, 2009; LeBlanc & Nguyen, 1996; Lewis, 1984, 1985; Li et al., 2012; Lockyer, 2005b; Marshall, 1993; McCleary et al., 1993; Rivers, Toh, & Alaoui, 1991; Sohrabi et al., 2012; Stringam et al., 2010; Wilensky & Buttle, 1988).

Introducing a three dimensional classification framework for the hotel attributes, Dolnicar and Otter (2003) demonstrated those issues which have not been treated sufficiently in the past and they provide a rough structure to classify past research and navigate further work. Their suggestions for future research include measurement of attribute importance under trade-off conditions and investigation of strong risk factors which are able to rule out any compensatory model of hotel attribute importance.

Based on a recent empirical research Jones and Chen (2011) found that respondents averagely used 3.3 attributes to establish their consideration set and used 2.6 attributes to limit it into a smaller choice set (Jones & Chen, 2011). This is while other authors sometime suggest more than 100 attributes might be effective on consumers' choice (e.g. Callan, 1995, 1998; Dolnicar & Otter, 2003; Dube & Renaghan, 2000; Wind, Green, Shifflet, & Scarborough, 1989). Jones and Chen (2011) suggest some other methodological limitations. Among them are: confusing the concepts of consumer choice and consumer decision making,

confusion of choice attributes and information sources, confusion between choice and repeat purchase, failing in consideration of consumer cut-offs, introduction of predetermined attributes to the respondents, asking respondents to comment on attributes that do not actually influence the purchase decision, confusion between importance and salience and finally and introduction of hypothetical hotels.

Several studies demonstrated that guests hotel selection and/or satisfaction criteria are influenced by consumers' personal demographic background (Ananth et al., 1992; Ariffin & Maghzi, 2011; Li et al., 2012; Reisinger & Turner, 1997) or trip purpose (Dube & Renaghan, 1999, 2000; Griffin et al., 1997; Lewis, 1984; Li et al., 2012; McCleary et al., 1993). Moreover, consumers' behaviour toward online reviews are also highly influenced by those two factors (Dickinger & Mazanec, 2008; Pourfakhimi, 2012). In addition, hotels can be categorized into several categories based on their service, price range, etc. Tanford et al. (2012) state that there is only a limited number of studies evaluating the factors that influence customers to choose one hotel segment over another, or the profile of those customers.

Conceptual Development

This research studies the impact of online reviews on hotel consumer behaviour toward hotel selection factors. Therefore it lies both in the domains of eWOM and consumer behaviour - particularly selection behaviour and purchase decision making. Despite several separate research studies about the hotel selection behaviour (Chu & Choi, 2000; Dolnicar & Otter, 2003; Li et al., 2012) and effects of eWOM on the customers' behaviour in tourism (Ye et al., 2011), there is only limited research about the influence of eWOM on the consumers' behaviour toward the hotel selection factors (see for example: Jones and Chen (2011)). This research aims to combine the above research domains to fill the gap of academic literature studying the potential influence of eWOM on consumers' hotel selection behaviour.

Pourfakhimi (2012) Previously found that a majority of Kuala Lumpur International leisure tourists may prefer a slightly more expensive hotel, a hotel with a lower star rating or a hotel from a less well-known brand if they read better

online reviews about them. However, it did not study to what extent this change happens and how this behaviour varies for different market segments.

This current research aims to identify to what extent the presence of eWOM can change the behaviour of respondents toward hotel selection factors. For example, if it can influence consumers to deliberately ignore a hotel attribute, which is logically deemed to be a highly influential decision making factor. This research will work to avoid the limitations in past studies about hotel selection factors through a number of ways. These include: (i) online reviews will not be considered as a hotel attributes, but as merely an information sources (ii) it will be tried to find out which hotel attribute areas are *determinant*, (iii) the number of these *determinant attributes* is expected to be very small (Jones & Chen, 2011), (iv) it will be tried to distinguish the difference between hotel selection attributes, and satisfaction, loyalty and repurchase factors. In addition in the research design, the hotel offers and the reviews will be simulated based on real cases thus the study aims to avoid (v) failings in consideration of consumer cut-offs, (vi) the introduction of predetermined attributes and (viii) asking respondents to comment on attributes that do not actually influence decision making. Finally, in order to neutralize the risk suggested by Dolnicar and Otter (2003), this research will also consider to what extent consumers may rely on their past experiences and prefer a tried and tested hotel to a hotel with better online reviews. This research is based on the conceptual framework of pervious scholars and will aim to expand their findings, particularly Jones and Chen (2011). In addition, within the framework of Dolnicar and Otter (2003), this study will only focus on the hotel selection factors which are considered by consumers before purchase happens. Moreover this study will try to recognize the effect of trade-off and risk and reduce the limitations introduced by (Jones & Chen, 2011) as the major limitations of previous work.

In order to recognize the importance of studying different market segments, hotels will be categorized into three categories of luxurious, mid-range and budget hotels. In this case, it will be possible to compare the behaviour of each market segment separately. This study will focus only on leisure travellers to avoid any limitation caused by different travel motivations. Furthermore, it will be sought to understand if there is any significant relationship between the demographic

characteristics and travel pattern of travellers and the impact of online reviews hotel selection factors.

In general this study will try to answer the following questions for each hotel segment (i) what are the “determinant hotel attributes” which affect leisure hotel consumer purchase decision-making?; (ii) how does the presence of eWOM change the behaviour of leisure hotel consumers toward “determinant hotel attributes”; (iii) to what extent does the presence of eWOM persuade leisure hotel consumers to disregard the better offerings of a hotel in terms of “determinant hotel attributes”; (iv) to what extent does the presence of eWOM persuade leisure hotel consumers to prefer a new hotel over a “satisfactory tried and tested” hotel. Finally (v) what are the similarities and differences in the answers to above four questions in each hotel segment; and (vi) how do consumers’ behaviour relate to their different demographic or travel patterns?

Proposed Methodology

For the purpose of this research a two-phase combination of qualitative and quantitative research methods will be used. As Schulze (2003) and Creswell (1994) introduce, in a mixed model of research a qualitative phase can be followed by a quantitative one. Thus, the two paradigms are clearly separate and the researcher can thoroughly present the assumptions underlying each phase (Schulze, 2003). In the first phase, through qualitative research, this research aims to identify the determinant hotel attributes which are influential on the consumers’ choice. In the second phase, the influence of online reviews on the consumers’ behaviour toward hotel selection factors will be studied using a quantitative approach. In the first phase, following an extensive literature review to shortlist all the possible attributes, panel studies and in depth interviews will be used to identify which attributes are determinant in consumer decision making. The findings will then be integrated and compared with the findings of prior research and a list of attributes will be finalized to be used in the next phase. Within the second phase through a pairwise comparison technique in a web-based survey tool will be used, so that people can make finer distinctions when they directly compare objects (Orme, 2005). The respondents will be asked to compare several pairs, each including two offers, and report their willingness to choose one of the offers using a 7 point Likert Scale. In each pair, two offers for a hotel (simulated

from actual hotels) with entirely the same attributes, except for an independent variable (which is one of the attributes identified in the first phase for the respective category), a combination of positive/negative reviews (extracted from real websites) and user ratings will be shown. While the offer with less favourable attributes (e. g. higher price) relatively has better online reviews/rating, the other with more favourable attributes (e. g. cheaper price) has a mix of neutral and negative online reviews/lower rating. These comparisons will be repeated to cover different scales of difference in independent variables and all different attributes. The demographics and travel patterns will be also asked.

Anticipated Results

This study will aim to find (i) the determinant hotel attributes which are influential on consumer decision making; (ii) the extent to which online reviews can change consumers' behaviour toward these attributes and; (iii) the differences in the hotel selection behaviour of consumers from different hotel segments and demographic backgrounds. Therefore the results will help industry players to (i) match their marketing activities and hospitality practices with the needs and wants of their respective market segment; (ii) identify which hotel attributes in each market segment are likely to be more effective for attracting consumers; (iii) realise how positive online reviews may give their business a better position for competition (iv) realise how satisfied customers may help their business to compensate the effects of its shortcomings by posting online reviews. This study mainly aims to fill the gap in academic literature about the influence of eWOM on consumers' behaviour toward the hotel selection factor and also to cover some limitations in pervious hotel selection factors research.

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Unwrapping the tourist experience; a SEM decision-tree approach.

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Abstract

Destination marketers should start treating the Web 2.0 tools as a new opportunity to reach out on the marketplace, and see them as a mechanism to learn about tourists' opinion of the destination, as well as the stories, comments, advice and pictures tourist share (Boulin, 2008). Knowledge about customer experiences, value creation and motives can be vital when making relevant and competitive experience design (Mossberg and Dorth, in press). Through a SEM- decision tree approach, new dimensions and connections of value dimensions and behavioural intentions within the tourist experiences can be indicated. Going beyond the rather fixed art-of-state measuring the tourists experience, this paper will open up new perspectives of the destination relationship in a holistic way. For practitioners this implies an effective development of branding strategies closely linked to customer value propositions.

Keywords: User generated content, value propositions, SEM-decision tree modelling

1 Problem definition

The development of information- and communication technologies allow destination management organizations (DMOs) to capture, analyze and utilize personal data of each customer or potential customer in order to capture tourist experiences (Camprubi *et al.*, 2013; Jalilvand *et al.*, 2012). Therefore destination marketers should start treating the Web 2.0 tools as a new opportunity to reach out on the marketplace, and see them as a mechanism to learn about tourists' opinion of the destination through the stories, comments, advice and pictures tourist share (Boulin, 2008). As different authors postulate, consumers need to be involved in providing information that can help companies to gain essential knowledge increasing their service delivery process. Vargo and Lusch (2004), introducing the Service Dominant Logic, already mentioned it; the customer

needs to be active and centralized in the value-creation process. Rubalcaba *et al.*, (2012) argue that the Service Dominant Logic offers a new paradigm that invites a focus on innovating customers, which means that service innovations is not just a new offering but rather improved customer value co-creation. However, Saarijarvi (2012) content the fact that the extant literature on value co-creation has rather been abstract in nature and provides only minor implications for managers and practitioners to consider the possibilities of value co-creation in different business context. Thus advising the concentration of systematically identifying and analyzing the value mechanism is required according to Saarijarvi (2012). Mossberg (2007) argues that companies can develop themes and stories which can support the communication of the core values in an understandable and memorable way. Therefore Mossberg (2007) also stresses the fact that knowledge what affects the consumers' experience is necessary when developing tourism products and thus creating value. Companies need to carefully analyze the nature of their customers' value propositions, to understand the core of their offerings and further, to find a mechanism that is balanced with it and to integrate additional customer resources for eventually delivering it (Saarijarvi, 2012). However empirical studies are rare identifying if the destination experience supports expected values and destination image attributes, as well as which of them make tourist decide to return to the destination. Therefore the purpose of this paper is to reveal latent nonlinear and interaction effects that might be rooted in tourist experiences considering, values dimensions, destination image components and behavioural intensions, by the use of structural equation modelling-based (SEM) decision tree. As Brandmaier & Von Oetzen (2012) argue, SEM-decision tree construction has a clear interpretability and predictably which will satisfy professionals. In addition, this study is of great importance for practitioners to develop branding strategies with value propositions that reflect customers needs and wants.

2 Literature review

Destination branding

As Blain *et al.* (2005) state that a branding concept incorporates visitors experience into the process of branding which is supported within a tourist destination context. In general terms branding is a process which attempts to influence how consumer interpret and develop their own sense of what a brand means for them. According to Blain *et al* (2005) effective destination branding can give visitors an assurance of quality experiences, reduces visitors search costs and offers a way to destinations to establish a unique selling proposition. If the

customer is familiar with the brand and holds some favourable, strong and unique brand associations in the memory decides the degree of brand efficiency (Garcia *et al*, 2012). Keller (1993, p.2) defines it as the differential effect that brand knowledge has on consumer response to the marketing of the brand. According to Ekcini (2003) a successful destination branding grounds in a positive relationship between the destination and the tourist. Qu *et al*. (2011) frame the destination relationship bases upon three dimensions; cognitive knowledge, affective knowledge and behavioural outcomes. They argue that these dimensions are necessary in order to reveal the holistic perspective, and thus indicating brand efficiency level of a destination.

Value

Prebensen *et al*. (2013) define experience value in tourism context as a compromise of the benefits the tourist perceives from a holiday and staying in a destination. Williams and Soutar (2009) argue that tourism studies tend to use simplistic value scales, which were either unidimensional (product or good value) or bi-dimensional value for money constructs (a trade-off between the quality and of the products and price). However to uncover what the customers wants and capture the evolving needs of customers, Prebensen *et al*.(2013) claim that a single-item scale does not address the whole concepts of perceived value. As Williams and Soutar (2009) pointed out, due to the diversity of tangible components as well as subjective, hedonic, emotional and symbolic components the tourist experiences can be perceived as significantly complex.

Social Media

Social media is considered as an Internet-based application that communicates consumer generated content (UGC) according to Blackshaw (2006). Lim *et al*. (2012) argue that the activities refer to the Internet such as posting, tagging, digging or blogging. Munar (2011) argues that tourists use three different types of content on web 2.0 spaces in order to refer to their experience with the destination; narrative, visual and audio. Lim *et al* (2012) argue, that social media has shifted the paradigm of brand creation since it offers a two-way communication of destination branding. Therefore Schmallegger and Carson (2009) argue that DMOs need to use social media for marketing functions and thus use it as a part of their business strategy. This reflects that social media makes it possible for marketer-generated content and consumer-generated content to coexist (Lim *et al*, 2012).

4 Proposed methodology

Ye *et al.* (2009) claim that there is an urgent need for innovative techniques that can automatically analyze the attitudes of customer in social media spaces. As Munar (2011) argues that researchers are challenged to capture and fragment efficiently massive amount of data. As a result presently many researchers are integrating quantitative and qualitative approaches in their website evaluations studies (Law *et al.*, 2008). However studies mainly using closed-ended survey are merely used to study destination image and its connected values system. As Lewis *et al.*, (2008) already argues, this does not allows for possibility that interpretation of a genre may differ among respondents; and that respondents may not conceptualize their experiences using genres (Lewis *et al.*, 2008). Therefore by retrieving data directly from social media platforms, interviewer effects and recall error of respondents can be avoided (Lewis *et al.*, 2008). At the same time they argue that social media platforms users contain a standard profile template that facilitates data cleaning, coding, and comparison across respondents. This also implies that the existing models evaluate destination image rather isolated and/or use rather single metrics. The value system linked to destination image, attitudes and behavioral intentions should be measures by a combination of various metrics. In order to address the abovementioned limitations, this paper proposes structural equation model-based decision tree construction for analyzing underlying interactions effects. (Brandmaier & Von Oetzen, 2013). The SEM-decision tree constructions allows the measuring of the tree cut-off links to demonstrate the structural patterns of connected value systems (Brandmaier & Von Oetzen, 2013). Structural equation model presents a clear representation of causality but lacks the revealing of nonlinear relationships (Brandmaier & Van Oetzen, 2013). Dhat decision tree are effective nonlinear data mining techniques with a high level of prediction accuracy and facilitate theory-guided exploration of empirical data (Turkyilmaz, *et al.*, 2013). Current studies mainly limit hypothesis models to linear relationships of value and destination image creation. The SEM decision tree modelling however allows to increase the accuracy of modelling and provide an understanding of the relationship between values, customer attitudes and behavioural intentions.

5 Anticipated results

The PhD thesis is just beginning of the process; therefore the anticipated results can only be drawing in a rough line. De-structuring the tourist experiences by modelling different value dimensions connected to attitudes and behavioural

intentions allows an accurate holistic view about tourist experiences. Nowadays destinations are forced to go beyond the traditional marketing strategies. Thus the deconstruction of the brand relationship becomes more significant for DMOs. By the use of consumer (voluntary) data input from social media spaces allows DMOS to effectively active the co-creation process of the branding process as well. The contribution of this paper is multifaceted; first there is recognition that SEM-decision tree modeling can be useful for deconstruction the destination experiences. Second there is not yet consensus on destination experiences to measure in UGC. Many existing studies tend to measure it through fix-listed of key elements presenting the fundamentals that represents the destination brand perceived by the customers. However understanding the different connections the keywords have among each other, as well identifying the main nodes and outliers will increase the insights how tourists actually discuss their destination visit. The innovative way of analyzing of UGC can expose interaction effects that otherwise would not have been revealed.

6 Conclusions

This study concludes that there is need to pay more consideration of potential nonlinear relationships that might be available among model constructs (value dimensions, image destination constructs and behavioural intentions). Consumers are perceived to be as a goldmine of information (Walls *et al*, 2011), research as practice should taken upon this significant fact. Taken the tourists voice into account, does not only allow the service provider to co-create the experiences but will as such have different spill-over effects such as increase competitive advantages and innovative development within the service-delivery-process. In addition, approaching the destination through a branding-relational perspective, it will allow DMOs to create stronger ties with their customers, which is a significant competitive advantage nowadays. By developing a branding strategy based upon the different value dimensions of tourist's experiences will increase the quality of the relationship between the tourist and the destination.

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The influence of social media on hotel brand personality

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Abstract

The research aims to critically analyse the influence of social media on brand personality within the hotel sector. The Aaker (1997) brand personality scale will be adopted and examined through the social media environment within the hotel brands, as this area of study has yet to be comprehensively investigated. The research will provide an insight into how generic brand management needs to and is changing as a result of contemporary and continuously evolving technology.

Problem Definition

Consumers select brand that matches, or is close to, their personality (Plummer, 2000). In the online environment, a number of researchers have attempted to use the brand personality model to examine online branding (e.g. Muller and Chandon, 2003; Chang et al., 2003; Opoku et al., 2006). Brand personality research in the online environment also extending into other areas (e.g. Okazaki, 2006; Ramaseshan and Tao, 2007; Lin, 2009). However, research on brand personality in the online environment is still considered to be limited (Harrhoff and Klyen, 2012).

The growing availability and popularity of social media has transformed the way people communicate, make decisions, socialise, learn, and interact with each other (Constantinides and Fountain, 2008). With the acceleration of internet and interactive power of social media, consumers are now creating new meanings and values about the tourism products and brands that are beyond the full control of tourism organisations. Having said that, the changes also offer tourism organisations an opportunity to humanise their brands and forge deeper consumer-brand relationships. Interacting with consumers in an honest and seemingly humble way that conforms to the norms of social networks and is consistent with the brand's personality, will take the brand closer to its customers and is more likely turn disgruntled customers into advocates (Xia, 2011). Although the importance of social media and brand personality has been well

described in marketing communication and brand management research, research in combining these constructs tends to be limited. In-depth research in understanding social media and brand personality is still required to clarify particular aspects. Therefore, the aim of the research is to critically explore the influence of social media on brand personality within the hotel sector.

Literature Review

Brand personality is ‘the set of human characteristics associated with a brand’ (Aaker, 1997). On the company side, by giving a human personality to the brands will enable companies to differentiate from and form identification of their products with competitors (Khare and Handa, 2009). Brand personality is one of the core dimensions of brand equity (Batra et al., 1993; Biel, 1993; Plummer, 1984; Aaker, 1996). On the consumer side, consumers use brands as symbolic devices to express themselves (Sirgy, 1982). Consumers tend to prefer brands with personalities that are congruent with their personality and self-concepts (Landon, 1974). Recognising this desire on the part of consumers to express themselves through brand personality is important to brand managers. A well-established brand personality presents the opportunity for consumers to develop a strong emotional tie to the brand (Biel, 1993; Johnson et al., 2000). A favorable brand personality is thought to positively influence consumer preference and choice (Batra et al., 1993; Sirgy, 1982; Biel, 1993), increase levels of trust and loyalty (Fournier, 1998).

Tourism organisations can seek to convey a certain brand personality through various branding strategies. However, consumers may interpret the communicated message through the prism of their own perceptions and therefore may respond differently to a brand message than that which was intended (Kim and Lehto, 2013). Therefore, the determination and elimination of potential brand personality incongruence between the brand and consumer is necessary. The rapid growth of Web 2.0 applications has generated an enormous volume of online User-Generated Contents (UGCs). With 400 million tweets sent daily, 144,000 hours of YouTube video uploaded daily, and 4.75 billion pieces of content shared on Facebook every day (Libert and Tynski, 2013), social media could provide a platform to understand consumer perception of brand personality.

The hotel sector is potentially one of the most searched tourism sector in the online environment. For example, according to a US based study, it has been found that almost 80 per cent of the research sample group used online review websites in searching 'where to stay' (Gretzel et al., 2007). In addition, Love et al. (2012) emphasises that brand management is of particular importance to the hotel sector. As such, it would seem appropriate for the research to be focused on this specific sector.

Conceptual Development

Given the constantly evolving nature of brand perceptions, both the consumer and the marketer have important roles to play in this process (Johar et al., 2005). As such, it is crucial to examine brand personality from the perspectives of both the consumer and the organisation to gain a holistic view of current position of the brand personality. Given this, the research will, examine the consumer perception of hotel brand personality within social media, and compare with the projected brand personality of the hotel brands. In addition, social media indicator will be developed to manage any gap between perceived brand personality and projected brand personality of the chosen the hotel brands.

Much of the work currently relating to brand personality rests on the research of Aaker (1997) and based on her brand personality scale as the measurement tool both in context and in culture (e.g. Davies et al., 2001; Inman et al., 2004; Johar et al., 2005; Pitt et al., 2006; Swaminathan et al, 2009; Lin, 2010). However, the generalisability of Aaker (1997) brand personality scale has been questioned (Austin et al, 2003), i.e. the brand personality scale in its current form is not universally acceptable. In addition, it appears that service brands may have been under-presented in Aaker (1997) brand personality scale (Musante et al., 2008). As such, the researcher of this proposal will test the validity of Aaker (1997) brand personality scale within the service sector, more specifically, the hotel brands.

Three social media platforms are chosen for the purposes of the research. Investigation of different social media platforms is likely to provide a more holistic view of brand personality.

Proposed Methodology

Firstly, an extensive literature review will be undertaken to critically analyse the concerned constructs. Official corporate websites, and the connected Facebook and Twitter accounts of the chosen hotel brands will be investigated along with the relevant market research reports, corporate annual reports, academic journal articles and quality business magazines to gain an overview of the projected brand personalities portrayed by the chosen hotel brands. Secondly, primary research will use qualitative methodology, notably, case study approach. Data will be collected from social media and semi-structured individual interviews. Specifically, Facebook, Twitter and Tripadvisor are chosen as the social media platforms to be investigated in order to gain a holistic view of brand personality of the chosen hotel brands. Following the results from the social media search, the researcher will interview hotel managers, professional marketing consultants specialising in hotel branding and academics in marketing, and ICT in Tourism to validate and enrich the data. Finally, comparisons and evaluations will be made using the results generated to better understand the influence of social media on brand personality within the context of hotel sector. Content analysis will be adopted in the research. NVIVO will be used to analyse the qualitative data.

Anticipated Results

In terms of contribution to knowledge, it is anticipated that the research will provide insights of how generic brand management is changing as a result of technology and social media. The validity of Aaker (1997) brand personality scale in the service sector will be confirmed or potentially rejected. In terms of managerial implications, the research would increase managers' ability to take advantage the "social intelligence" via this in depth study of social media and

managing the gap between organisation projected and consumer perception of brand personality. Hotel management will benefit from this research.

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The potential use of ICT to enhance agritourism in Lesotho

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Abstract

Agritourism is a significant form of tourism that can support local rural communities and enhance sustainable rural development. Over the years, technology has changed the nature of the agritourism industry. Like any other industry, changes driven by technology posed a major challenge in agritourism production and marketing especially to farms that do not have access to and knowledge about technologies in agritourism. This study will explore how the different types of ICT available for agritourism can help contribute to local development and help overcome the barriers inhibiting the use of ICT by farmers in local communities in Maseru district of Lesotho. Multiple-case study will be employed as a research strategy and different commercial farms will be judgmentally selected. The study has adopted a framework derived from Information Innovation Model to evaluate the use and behaviour of farmers concerning ICT use.

Keywords: Agritourism, ICT, e-Tourism, local development

1. PROBLEM DEFINITION

The emergence of Information Communication Technology (ICT) has played a major role in promoting sustainable development and improving the livelihoods of the farmers in the agritourism sector (Maumbe, 2012). With the growing demands for agritourism products and services; Nnadi et al (2012) mention that ICT has opened new opportunities in knowledge management that could assist farmers to overcome potential barriers related to sharing, exchanging,

disseminating knowledge as well as how to sustain and improve their livelihoods. Information is the most valuable input in agritourism, and its access has to be accurate and timely to ensure sustainable agricultural practices (Singh, 2012). According to Munyua (2012), ICT helps in diffusing information to local communities and provides access to knowledge needed by tourists, farmers and farm employees in their daily operations.

Despite the importance of ICT for agritourism development and production, the agritourism industry is faced with new and severe challenges (Arker, 2010). According to Frempong (2008), studies indicate that research in the field of agritourism is weak in Lesotho and has been a relatively neglected issue especially in the field of information technology (IT). There are no functional linkages between research, crop and livestock services and private sector organisations; this has resulted in gaps in technology packages promoted for rain-fed agritourism production systems. Many farmers in rural communities of Lesotho do not have access to ICT making it difficult for them to communicate agritourism products and services to the market resulting in lower sales and productivity.

2. LITERATURE REVIEW

2.1 Overview of Agritourism

Agritourism is one of the fastest growing industries in the domain of eco-tourism and has driven a restructuring of the broader agricultural industry (Che, 2007). It can be defined as a specific form of local tourism that involves tourists staying on a farm and engaging in daily agricultural activities, and learning of the traditional rural activities that take place on the farm which include: - horseback riding, winery tours, agricultural exhibits, garden tours, and On farm sales (Havlicek et al, 2009).

2.2 e-Tourism: opportunities and challenges

e-Tourism is the utilisation of ICT to enable tourism providers and destinations to operate more efficiently, reach and serve consumers more efficiently with facilities to search, compare as well as book tourism offering through electronic media (Khanchouch, 2005; Buhalis & Law, 2008). Tourism emerged as a way forward for destinations and businesses across the world at different levels. The tactical level includes e-commerce and ICT for maximising the internal efficiency and effectiveness of tourism companies. At the strategic level, e-tourism revolutionises all business processes, which include the entire value chain and relationships of tourism businesses with their stakeholders.

e-Tourism provides opportunities for business expansion in all geographical, marketing and operational levels (Buhalis, 2003). The number of new players has also come into the tourism marketplace because of online and infrastructure expansion. A good example include hotels, which utilise ICT in order to improve their daily business operations, management of their inventory as well as maximisation of their sales and profits. Buhalis adds that tourism establishments take advantage of intranets in order to recognise their internal processes and extranets to develop business transactions with their customers and the internet to interact with all the stakeholders.

ICT is also used in improvement of production, reduction of poverty as well as enhancing food security in agriculture (Tembo, 2008). Arker (2010) also adds that ICT have been proven to reduce costs and allow small businesses to compete at an international level. e-Tourism increasingly determines the competitiveness of the organisation and therefore it is critical for survival of the industry in longer term. It also provides easy access to information regarding tourism offerings, better information on tourism services and convenience for customers (Kim, 2004).

Despite the importance of e-tourism, Stiakakis and Georgiadis (2009) identify the insufficient of ICT adoption by tourism industries as a barrier to equal opportunities to commercial activities. For example: businesses without access to the internet and other related technologies may not be able to benefit from e-services that are presented and could also be driven out of competition by global market. Despite efforts to apply ICT us in developing countries, the majority of businesses still have no, or limited access to modern tools, which highlights the digital divide between countries (Tembo, 2008). Other barrier include: access to limited knowledge of available technologies, poor technical infrastructure, high cost of access and system maintenance, lack of confidence in the benefits of e-commerce, lack of awareness and a shortage of skilled human resources and training.

2.3 The role of e-Tourism in local agriculture development

Agritourism is faced with a number of challenges that affect farmers' abilities to obtain income from the land. Like in any other sector, the contribution of agritourism to development depend on the generation and delivery of new technologies and these technologies are described as information intensive (Tembo, 2008). The awareness of, and continuous access of information by agritourism businesses, tourists, suppliers and other people living in rural communities remain the main requirements for rural development. Bertin (2012) states the link between agriculture and tourism can be strengthen by enhancing or

increasing access of small-scale producers using improved information technologies in order to realise a more reasonable distribution of economic benefits of tourism related activities.

Rural communities provide economic and cultural support (Inusa, 2006), for these reasons, it is important to find ways to make rural communities viable. Policies and strategies, which can create opportunities for development in rural communities, need to be development. Government, the private sector and other non-government organisations should also recognise the significant role that rural communities play, especially in agritourism through determining social and economic benefits in developing countries.

1.1.1 3. CONCEPTUAL DEVELOPMENT

The study focuses on the factors that determine the use of ICT, and therefore proposes a framework adapted from the Information Innovation Adoption Model by Alvarez and Nuthall (2006) to explain the behaviour of farmers and employees concerning ICT use. Despite the fact that ICT has been around, it is still a new theory to small farmers especially in rural communities of Lesotho. Small farmers still do not know which specific ICT are used, how, when and by whom in different areas of agritourism projects. According to Mapeshoane & Pather (2012), when users are presented with technologies, there are certain factors that may influence their decision to use. The propose framework uses behavioural modelling concepts that were proposed by Kline (1988) and mediating variables to access the relationships. It also indicates that the use of IT by farms relies on three types of variables and relationship between them is not a simple direct one. The variables include Antecedent variables such as characteristics of a farmer (age, income, personality and formal education), farm characteristics (farm size and crops grown on the farm) and community culture.

The second type consists of mediating variables (coping style of farmers, use of ICT in decision making, information management style, goals and objectives pertaining to ICT) that describe how effect will occur by accounting for the relationship between the independent and dependant variables. Mediating variables explain why antecedent variable affects the outcome variable. It also provides a complete explanation and better understanding of information management behaviour. These variables depend on antecedent and mediating variables. Current use depends on community culture, farm and farmer's characteristics, farmer's goals and objectives as well as management style.

It is from this framework that the use of ICT in agritourism will be evaluated to solve the phenomena under investigation. The framework has introduced

participants such as farm employees and tourists. From the framework, only factors that are significant and have relationship with ICT use in agritourism will be evaluated and these include; the farm size, farmer's age, goals, income, personality and formal education, information management style, goals and objectives pertaining to ICT, government, cost and training.

1.1.2 4. PROPOSED METHODOLOGY

Based on the need to understand the contextual and natural settings affecting the use of ICT by farmers in rural communities of Lesotho, an interpretive paradigm appears to be appropriate for this study. According to Moustafa (2011), the differentiation between quantitative and qualitative approaches is in the nature of data. This type of study has never been undertaken before in Lesotho, so the researcher will employ qualitative approach mainly because it provides rich data about the problem under investigation. It will also assist in generating knowledge and better understanding about specific factors that affecting farmers with regard to ICT use in agritourism from the context of their experience. The quantitative approach was not considered as it focuses on statistical and representative data and not offers a deep experience of some nuances that characterise the agritourism enterprise in Lesotho. The researcher is only interested in learning about the in depth aspects of human behaviour and adoption when it comes to ICT use in agritourism.

The researcher will employ a multiple-case study approach and various methods to collect data. According to Dobson (1999) a multiple-case study presents a suitable example on interpretive research. The intension of case study research in the context of this study is to gain an in-depth understanding of the phenomenon under investigation. Judgemental sampling will be used to select a total number of ten farms as units of analysis in rural communities of Maseru, in order to explore differences between these cases and assist in replicating the findings across them. Response population will include a mixture of twenty farmers, farm employees and tourists that have or are involved with the problem under investigation. Face-to-face interviews with the respondents will also be conducted in order to gain more information on the challenges, barriers as well as success factors facing the agritourism industry. Interview questions will be compiled to produce reliable response from the sample to determine what participants do, think and feel about ICT use.

The study will apply content analysis as an appropriate approach for analysing data. According to Myers (1997) content analysis is used for making replicable and valid reference from data to their context. The reason behind this is to explore

data in-depth and obtain a valid reference of the case study. Data will be recorded and transcribed so that the detailed analysis can be carried out. Data will then be coded by looking for specific words relevant to the topic for which themes can be identified in the text provided for analysis. Data will then be grouped and distilled from the text and list of common themes in order to give expression to the communality of voice across participants.

1.1.3 5. ANTICIPATED RESULTS

The significance of the research is to provide the farmers with a practicable and communicable framework which identifies the different types of ICT that are available to use with the aim of contributing towards agritourism development. The research will further identify the factors that inhibit the use of these technologies in agritourism projects. This will help both farmers and agritourism stakeholders such as farm employees, tourists and government developments recognise challenges concerning ICT use, especially in rural communities. These results will aim to contribute to the e-tourism and development, body of knowledge and increase understanding on how, by whom and when ICT can be used by farmers and other agritourism stakeholders.

1.1.4 6. REFERENCES

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Factors Affecting Consumers' Attitude and Intention toward Online Airline Ticketing

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Abstract

In the last decade, the internet and advancement of information technology have radically altered the way in which consumers perform many everyday activities such as shopping, banking including the buying of airline tickets. This has brought about changes to the workings of the travel industry in terms of the provision of services by the travel agencies, access to online ticketing sites by the consumers and also the direct competition by airlines for customers. Along with this paradigm shift is the changing consumer purchasing habits when it comes to buying their airline tickets. Consumers now have the option of buying online instead of through the traditional travel agencies which perform services for the consumers such as bookings, issuance of tickets and collection of payments on behalf of the airlines. According to Yoon et.al.,(2006), it is with this autonomy and new-found consumer independence which may jeopardise the future of travel agencies. This research seeks to understand the causal relations of the factors affecting the consumers' attitude and intention toward online airline ticketing.

Keywords: *Online airline ticketing, Theory of reasoned action, Theory of planned behaviour, Technology acceptance model, Behavioural beliefs, Subjective norm, Attitude, Intention, Intuition*

1. Introduction

The face of the travel industry has undergone significant changes over the past decade. Much of these changes are attributed to developments in the information technology, services and applications coupled with the increasing competitive environment. The various sections in the travel industry are affected; the airlines as suppliers, travel agencies as service providers, and the consumers of such services i.e. the travellers, with the changes to the global distribution channels brought about by the generalised use of the internet and related information and

communication technologies. There are positive impacts on the travel industry such as improvement in the distribution channels (Carroll and Siguaw, 2003) and disintermediation (Buick, 2003). But there are also negative impacts on the industry such as price transparency (O'Connor and Frew, 2004) and reduced customer loyalty (O'Connor and Frew, 2004). Along with this paradigm shift, is the changing consumer purchasing habits when it comes to buying airline tickets, they have the ready option of buying online rather than through the traditional travel agencies which perform that services for the consumers such bookings, issuance of tickets and collecting payments on behalf of the airlines. According to Yoon et.al., (2006), the future of travel agencies may be uncertain. This area of interest has drawn the researcher to examine the underlying factors that affect consumers' attitude and intention toward online airline ticketing.

2. Problem definition

Based on the literature review, the researcher is confronted with the following issues:-

- The salient research question on what are the factors that affect consumers' attitude and intention toward online airline ticketing and five related questions on demography and areas not accounted for in the model such as internet usage history of the respondents
- What are the casual relationships between these influencing factors and the need to have hypothesis testing for each of these relationships. Fifteen hypotheses were formulated for testing based on the conceptual model.
- A gap in knowledge has been identified through literature review done. Thus far, very little is written on this particular area of interest.

The six research questions formulated are as follow:

- 1) *What are the factors that affect consumers' attitude and intention toward online airline ticketing?*

Essentially, there are many influencing factors at play that affect consumers' attitude and intention toward online airline ticketing. Knowing consumers'

attitude and intention is very critical in that attitude and intention lead to actual behaviour and purchase online their airline tickets and for their travel needs.

- 2) *What are the causal relationships between the independent variables and the dependent variables?*
- 3) *How significant is the role of referent(s) in the adoption of online airline ticketing?*

Question 3 in particular is related to the subjective norms which capture the consumers' perceptions of the influence of their referents (e.g. family, friends and colleagues). It is related to behavioural intention in that people often act based on their perception of what others think they should be doing.

- 4) *Does age, gender or education level of consumers have any significant impact on the attitude and intention toward online airline ticketing?*
- 5) *Which of the constructs have significant impact on consumers' attitude and intention toward online airline ticketing? and*

- 6) Two related written questions in the questionnaire concerning internet usage history.

a) *How long have you been purchasing airline tickets online?*

Less than 6 months? 6 to 12 months? 1 to 3 years? 4 to 6 years? or 7 years or more?

b) *How often do you buy things over the internet?*

Never? A couple of times a year? Monthly? Week? Daily?

Internet users are not homogeneous and the above questions will shed light on the internet usage history and explain why the respondents adopt or do not adopt online ticketing but not accounted in the conceptual model. The respondent needs only to circle the number that best describes his/her answer and will be accounted in the descriptive statistics.

3. Objectives of research

The first objective of the research is to seek answers to the six research questions formulated particularly the salient question on the factors affecting consumers'

attitude and intention toward online airline ticketing and the five related questions to include areas not accounted for in the model. Airline travel has a wide impact on consumers globally. The necessity of speed of travel to reach their destination, the increased frequency and high traffic of travels with a considerable sum of money involved when performing the journeys as compared to other mode of travel such as rails or coaches have heightened its importance in the tourism and travel industry.

The second objective is to develop a conceptual model supported with relevant theoretical framework to elucidate the relationships between these factors and for hypotheses testing. The conceptual model incorporates the Theory of reasoned action (TRA), Theory of planned behaviour (TPB) and Technology acceptance model (TAM) to understand the causal relationships of the factors impacting attitude and intention of the consumers under study. This is because predicting attitudes is the most important concern for most people who are concern with consumer behaviour (Petty et. al., 1991). TAM has further been developed into model 2 and model 3 (Venkatesh, V., Bala H., 2008). Factors in TAM 3 such as adjustments, anchors and external factors have been viewed but only basic TAM adopted as it is relevant to the present study. However, this may be a limitation but will be an area for future research. By incorporating the three theories in the model and using constructs derived from the semi-structured interviews by the researcher, it is intended to address the weaknesses of adopting a single theory as highlighted in the literature review. In addition, from the literature reviews, affective forecasting or intuition also impacts attitude change. For this research, one intuition related construct generated by the researcher is adopted and incorporated into the model.

Third objective is to fill the gap in knowledge identified through literature review and to contribute knowledge in this area through this research and from the findings. Although, there are many studies been done by researchers in the context of internet usage, there is little literature written on the factors affecting consumers' attitude and intention toward online airline ticketing. In addition, there is no specific theory one can employ to examine the subject of interest. Despite significant progress by researchers on online consumer behaviour, it remains true that the scope of these studies still remains broad and relatively fragmented with no unifying theoretical model found on this research area (Cheung, et. al., 2003). The researcher seeks to fill the gap in knowledge presently lacking through this research. It is also intended that the conceptual model in this research could be adopted for other similar studies.

4. Literature review

The topic on online consumer behaviour has been examined over the past three decades but the debate still persists. This is because no unified theory exists. Cheung, et. al.,(2003) cited that researchers from various business disciplines have made progress over the recent years but the studies appear fragmented with no unifying theoretical model found in this research area. The scope of these studies is rather broad. However, Cheung, et.al., cited that the dominant theories in this area are; Theory of reasoned action and its family theories including Technology acceptance model and Theory of planned behaviour. Expectation-Confirmation Theory (ECT) (Oliver, 1980) and Innovation Diffusion Theory (IDT) (Rogers, 1995) have also been found to be used to study online consumer behaviour. The findings of Cheung, et.al., (2003) show that most researchers depend heavily on theories of TRA family (TRA, TPB, and TAM), while other useful theories such as Flow Theory (Csikszentmihalyi,1988) are ignored. Thus in their views, “researchers therefore, should try to explore new theories and frameworks and investigate online consumer behavior from different perspectives and angles” (p.198).

Based on the literature review, a conceptual model is developed with the theoretical framework based on the aforesaid theories and as shown in Figure 1.

5. Conceptual development

The conceptual model integrates the Theory of reasoned action, Theory of planned behaviour and Technology acceptance model to form the theoretical framework to elucidate the causal relationships of the influencing factors examined.

The conceptual model has nine independent variables and two dependent variables. In all, fifteen hypotheses will be tested. The four selected behavioural beliefs: prices, security, trust and convenience and subjective norms/referents were derived from the semi-structured interviews conducted in accordance with the suggestions of Ajzen and Fishbein (1980). The respondents were requested to complete a written questionnaire after the interviews. The variables from the interviews formed part of the building blocks with which the conceptual model is developed.

Perceived control, a component of TPB is included in the model as it is a relevant variable as it reflects people’s actual control over the attitude and intention and

eventual behaviour (Ajzen, 1985). The basic TAM model with the constructs: perceived usefulness and ease of use is adopted in the model as literature review lends support to the use. It is widely employed in many similar studies concerning online transactions. It is noted that TAM has undergone further developments into TAM 2 and TAM 3 model with more components such as anchors, adjustments and external factors in the model 3 (Venketesh, V., & Bala, H., 2008). This may be an area to look at in depth for future research.

A new variable named as “Value for money” (VFM) is not derived from literature review but is generated by the researcher. This variable is not treated as a factor in the related literature. The researcher intuited VFM as a variable on the ground that it may have a significant impact on attitude change of consumers when they are browsing online for airline tickets. Thus, it is embedded in the conceptual model. The perception is that in buying online one is getting value for his or her money. Price as a construct is in the model. Generally, prices are viewed as relative as a price may appear low to one customer it could be viewed as high by another. Besides, prices for airline tickets fluctuate over time and between different airlines whether for commercial or budget airlines. A question in the questionnaire includes the dimension on asymmetry of information (Campo, S., & Maria Jesus Yague., 2009). This could be a pertinent consideration for informed decision to be made. Situation may arise where not all consumers have the benefit of full information available before making decision when going online airline ticketing. The intuition of the consumer is going online he or she will get value for money. This intuition of the consumer may impact his or her attitude change (Loewenstein, G., 2007).

6. Methodology

This is a quantitative research and deductive approach is adopted for this research. The research strategy is through conducting survey by administering questionnaire. The questionnaire will include eleven constructs with a total of 42 items. Most questions are sourced from those tested questions with measurements and adapted for use, except the one new variable, VFM. The scale employed in this research is a seven point Likert-type scale with 1 signifying “Strongly Disagree” and 7 signifying “Strongly Agree”. The questions in the questionnaire will remain identical consistently and throughout the survey exercise. The survey allows for collection of data from a sizeable population which is necessary for the researcher to justify the generalization of the findings. The strategy of carrying out a questionnaire survey is cost effective and relatively quick as compared to other mode of data collection. Moreover, the survey allows the quantitative data

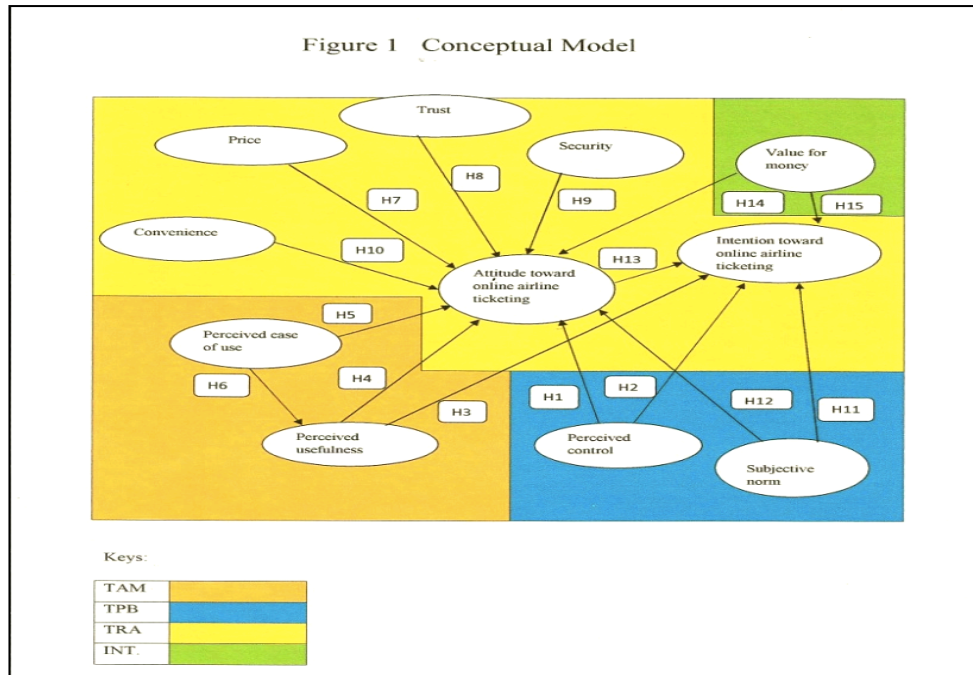
to be analysed quantitatively using both descriptive and inferential statistics (Saunders, M., et. al., 2009). However, survey has its drawbacks. These include limited number of questions that could be asked in the questionnaire. Responses may be poor. Recognizing these issues, attempts will be made to have follow-up and to ensure a population size is adequate so findings are not compromised but are reliable and valid so generalization of such findings can be made.

From the semi-structured interviews conducted in accordance with the procedure suggested by Ajzen and Fishbein by the researcher recently, four constructs on beliefs and three subjective norms/referents were selected to be included in the main questionnaire for hypotheses testing and for identifying their causal relationships. The researcher has carried out a pilot test on the draft questionnaire with a dozen of doctoral students and three family members with the intention of getting comments for improvement and to ensure clarity of the questions asked. The feedbacks were positive and questionnaire has been amended accordingly. Presently, the researcher is awaiting clearance from the University to proceed with the actual survey. The said questionnaire is as per Attachment marked as Appendix A for your comments, please.

6.1 Research Method

The questionnaires include demographic questions on age, gender, ethnicity, income and education level. Some constructs on attitude and subjective norm, perceived control, TPB questionnaire will accord with samples and scale of measurements as given by Ajzen (2010). In all, nine independent variables and two dependent variables would be examined. Figure 1 shows the casual relationships between the various constructs of the model and arrows are indicative of the direction for hypothesis testing. Fifteen hypothesis statements will be tested to elucidate their casual relationships.

All questions are sourced from tested questions with measurements and adapted for use except the variable, VFM generated by researcher but pilot tested.



7. Anticipated results

The anticipated results will include the following salient dimensions of the research: The six research questions answered. Accept or reject respective hypothesis statements tested. Drawing conclusions from the findings after running the Structural equation modelling (SEM) employing AMOS as the statistical software on the data collected. The researcher hopes the findings could be generalize for the population. Additionally, the researcher can derive descriptive statistics from the returned questionnaire on areas not accounted in the model.

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Improving Carrier Access during Rural Emergencies (ICARE): Results from Qualitative Assessment of Willingness to Volunteer Vehicles for ICARE Project in Rural India

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Abstract

In rural India and elsewhere, rural citizens affected by health emergencies including maternal delivery suffer from limited and timely access to motorized transportation to visit the nearby primary and tertiary health centres. Limited access deters beneficiaries willing in availing healthcare while creating negative attitude among others against visiting health facilities.

Making ambulances available at the block headquarters through private or public providers in Indian rural health program National Rural Health Mission has provided the rural beneficiaries with somewhat limited access to transportation. To improve access to transportation significantly, this paper proposes an intervention called Improved Carrier Access during Rural Emergencies or ICARE.

This intervention shall use vehicles and driving volunteered through citizen vehicle owners. In rural India, there are approximately one vehicle available in every 110 – 130 families. This ‘public community partnership’ model shall enrol the volunteering vehicle owners and individual drivers in rural communities in a central database. Then, the rural beneficiaries in health emergencies can call a call centre number which shall be populated in the project area. The call centre

operator shall identify the beneficiary location and locate the nearby vehicle owner. The operator shall then recruit a volunteer vehicle for carrying the beneficiary to the health centre for a fee to be reimbursed either by the beneficiary or by the government.

An assessment carried out in rural Odisha in India showed that 75 percent of four wheeler and 78 percent of three wheeler owners or drivers were willing in volunteering their vehicles to support social cause or for payment or for both.

This qualitative assessment showed the feasibility of the ICARE concept in rural north India as practical solution to overcome limited availability of transportation for improving access to health facility among rural population.

Keywords: institutional delivery, health emergencies, National Rural Health Mission, transport, access to health, call centre, India

1. Introduction

Rural north India suffers from high degree of maternal and neonatal mortality and morbidity. A survey in Uttar Pradesh found that 20 percent pregnant women and their families decided to conduct the deliveries at home for the lack of transport (N = 2,493) (Varma, D. S., Khan, M. E., and Hazra, A., 2012). Therefore, limited access to transport has remained significant barriers for access to services and supportive behaviours for the pregnant women and their families in opting for institutional delivery. Besides pregnancy. Besides maternal health, lives suffering a high degree of health-related emergencies including accidents, suicides, heart attacks, and similar emergencies can be prevented from timely transportation to the health facilities. Therefore, access to timely and reliable access to transport service is priority for improving access to health facilities for a variety of health emergencies in rural India.

This paper describes the design, implementation and evaluation method of an intervention to overcome the limited access to transportation. This intervention was developed and currently being implemented as part of the coursework in the

graduate computing degree by the author in the School of Computer and Information Sciences of Indira Gandhi National Open University.

2. Literature

The literature review section explores prior studies on the effects of limited access to transportation in access to healthcare among the rural Indians. This section also reviews projects that aim to improve access to transportation in rural India and elsewhere. Several searches using keywords in general internet search engines (Google), and specialised search engines and subject gateways such as PubMed at <http://www.ncbi.nlm.nih.gov/pubmed> (U.S. National Library of Medicine), Centre for Health Market Innovations at <http://healthmarketinnovations.org> (Results for Development Institute), along with references by colleagues helped identification of relevant information for the purpose of this review.

2.1 Challenges in Access to Effective Transport

The study by Varma, D. S., Khan, M. E., and Hazra, A., 2012 referred above reported qualitative and quantitative findings from a survey among households with instances of pregnancies. The authors reported perceptions around non-availability of transportation (20 percent) and immediate expenses for availing institutional delivery were major reasons for conducting delivery at home. The study found that husbands as a decision maker for the place of delivery wanted to have the convenience of home (69 percent) and cost consideration (30 percent). The study quoted one husband:

Home delivery is better...Rs. 2,000 will be needed immediately for hospital delivery...4-5 people will be troubled...to accompany the woman...we have to find a vehicle...

(Source: Varma, D. S., Khan, M. E., and Hazra, A., 2012)

IntraHealth International, an international non-profit organisation, was implementing the Manthan project in rural Uttar Pradesh to improve maternal and child health. This project included an intervention called Prasav Parivahan Seva to provide transportation to pregnant women for delivery in health facilities. A

survey conducted in this project found that all women opted for institutional delivery arranged their own transport, while only 57 percent used motorized vehicle. The survey found that median post-delivery stay stood at three hours, as pregnant women and their families wanted to utilize the vehicle they used to reach the health facility to return to their homes. They also feared hiring a vehicle for returning home from facility at a later date will cost them more (Khan et al. 2011).

2.2 Interventions for Improving Access to Transportation

In India, 108 service provides emergency medical transportation service or EMTS in select cities. A non-profit organization Emergency Management and Research Institute (EMRI) in southern state of Andhra Pradesh launched this service in 2005. Subsequently, this service was scaled up across several Indian states.

The PPS intervention of the Manthan project cited above uses a public private partnership model to engage four ambulances covering a population of 416,000 in Mauranipur and Bangra blocks of Jhansi district. The PPS project aimed to provide free and timely transportation to a facility for delivery and obstetric services and free drop-back service post-delivery and postpartum care. The two ambulances were stationed in PHC. The beneficiary family or FLW called the 24 hour call centre operated in district hospital. After receipt of the call, the call centre executive directed the vehicle operator to proceed to beneficiary home and intimated the PHC about the beneficiary. During nine-month operation, PPS transported some 2,376 beneficiaries and made 3,967 trips. The study reported that two third women utilised the service both for pick up and drop back. Women using PPS stayed back at the facility for more than six hours.

The cost of PPS included onetime expenses included call centre set up such as phone line, furniture, publicity, and vehicle branding. Recurring costs included salaries of call centre operator, office supplies, and vehicle operator payments. Vehicle operator payment was fixed for kilometre. The study assessed the onetime and recurring costs to arrive at Rs. 14 per kilometre (IntraHealth International, 2013).

In Africa, Riders for Health, an international NGO and not-for-profit social enterprise, manages some 1,300 vehicles for carrying patients to facilities in Sub-Saharan Africa. It uses training and a robust maintenance service to utilize motorcycles, ambulances and other four-wheel vehicles for health delivery. In addition to providing transportation to beneficiaries and health workers, the intervention Riders' Sample Transport launched in 2013 started transporting samples in seven districts in Malawi.

3. Research and Intervention Design

3.1 Shortcomings in Current Interventions

The literature review suggests that limited access to transportation poses a key behavioural and service delivery barrier for various health issues. The interventions described above uses vehicles hired from commercial providers and stationed in a central location such as block or district health facility. Besides, there is a call centre where family or health workers can call for the vehicle. Available studies or the reviews provide limited data on the gaps in terms of such as delays and non-availability of transportation services provisioned through 2-4 ambulances in block headquarters for the eligible beneficiaries or beneficiaries willing to avail the service.

In rural Odisha, the expected deliveries for one year based on 2011 population census stands at 699,411, considering the current crude birth rate (CBR) of 20 (National Health Systems Resource Centre, 2012). On an average, there is 2227 expected deliveries in a block in a year or 6 pregnancies every day, overlooking the seasonality. Considering the number of various health emergencies, remoteness, vehicle breakdown, round the clock availability, poor road conditions, it is likely 2 to 4 ambulances may be inadequate. More importantly, there is likely to be significant time lag between call requesting for vehicles and their arrivals in and around beneficiary residence.

In view of this, the proposed intervention shall ensure availability of the vehicle by a) having it stationed in minimal distance from beneficiary residence,

compared to distance to block headquarter, b) having alternate vehicles available on call in the event of non-availability of the desired vehicle, c) having cost per trip equal or lesser cost than ambulances managed through PHC.

3.2 Intervention Design

This intervention called Improved Carrier Access during Rural Emergencies or ICARE aims at providing reliable and timely access to transportation for pick up and drop back for accessing health facilities to rural population in India, while containing cost. Recent round of census in 2011 reported availability of some 75,185 vehicles (includes cars, jeeps, and vans) among 8,144,012 rural households in Odisha. This translates to an availability of one vehicle in an average 108 households. To give a perspective, there are 150 to 200 households in a village in Odisha. A village spreads on an average 5 to 10 km.

These vehicles owned by individuals for civilian or commercial purposes can quickly ferry the beneficiaries to health facilities for a fee. For delivery, National Rural Health Mission reimburses the beneficiary the transportation charges. Therefore, the vehicle owner shall get the reimbursements for pick up and drop back for pregnancies. For other health emergencies, beneficiaries are likely to make out of pocket payment to the vehicle owner. A survey was carried out in several villages in rural Odisha to assess the availability of vehicles and willingness among individuals to volunteer their vehicles. It is also possible that vehicle owners may not be interested in driving during odd and late hours and in remote areas. Individuals with driving skills can drive these vehicles as well.

Health workers such as Accredited Social Health Activists (ASHA), Anganwadi Workers (AWW), and the Auxiliary Nurse Midwife (ANM) who deliver health services in their assigned villages under NRHM, can enrol the willing vehicle owners and drivers using plain in a printed form or over the phone. The vehicle registration data then can be stored in a central database for access by the call centre executive.

Health workers or beneficiary families can call the call centre to request for vehicle. Call centre executive shall then search the database to find vehicle nearest to beneficiary residence. CCE will then call the vehicle owner to request her to pick up or drop back. If the vehicle owner refuses to transport, CCE will continue this process with next vehicle owners till the request is accepted or all viable options are exhausted. Once a vehicle owner confirms, CCE shall inform the vehicle owner the address and timing for pick up or drop back. CCE shall also inform the approximate arrival time to beneficiary. The call centre application shall also generate an automated SMS with details of vehicle owner, beneficiary, origin location, destination location, and timing. The SMS may be communicated to vehicle owner, beneficiary, concerned health workers, and destination health facility.

For trips reimbursed by the government health departments, the health facility can reimburse by cash upon arrival or departure of the beneficiary, with endorsements of medical officer and health worker. The transaction can be recorded in the proposed web application. Beneficiaries can pay directly for trips which are not reimbursed by the government.

3.3 Research Design

Central to this intervention is the willingness among the vehicle owners and their motivation to volunteer their vehicles. To assess these factors, a survey was planned and conducted involving relatively smaller number of vehicle owners for six days during April, 2013. A structured questionnaire was prepared for this qualitative study.

3.1 Data Collection

The qualitative survey was conducted by two field investigators with prior experience in data collection and survey techniques, with two supervisors with experience of working in public and social sectors. The author explained these supervisors about the rationale, objective, and methods of interviews before the field investigators started the survey process. The field investigators were conversant in the local language Odiya. The interview process was guided by the structured questionnaire prepared by the author. To improve data integrity, the

author asked to capture the photo of the interviewees along with the vehicle and driver's license.

Participants to this interview were from three blocks of Ganjam district of Odisha - Hinjilicut, Sheragarh and Sanakhemundi (Figure 1).

Figure 1: Selected blocks in Ganjam district, Odisha for qualitative assessment



In rural areas, there are only few people who own vehicles and villagers tend to know those owners. The field investigators identified the vehicle owners through interacting with the community members. There were initial scepticism when field investigators enquired about the vehicle owners among the community members. The villagers divulge the names and locations of the vehicle owners, once the field investigators explained the purpose of the study.

The participants included owners or drivers of 18 three wheelers (called auto) and 40 four wheelers. These three wheelers were primarily commercial vehicles, while four wheelers were meant for commercial or civilian usage.

The structured discussion aimed to gather demographic data of the vehicle owner, willingness among the vehicle owner in providing the transportation services primarily for institutional delivery, and motivation for providing the service.

3.2 Data Analysis

Recorded interviews have been transcribed and analysed from reading the responses recorded against the specific questions field investigators asked to the vehicle owners. The answers were tabulated in a spreadsheet on various aspects: availability of vehicles in surveyed geography, willingness to volunteer vehicles, current vehicle usage pattern, whether vehicle driven by self or hired driver, usage timing, motivation for volunteering vehicles, among other topics.

4. Results

The previous section specified the key questions explored through the survey and data analysis. For this paper, the key issues are availability of vehicles, willingness and motivation for volunteering vehicles. These determinants shall impact the feasibility of the ICARE project. Therefore, this section provides the results obtained on these three questions.

4.1 Availability of vehicles

The paper quoted the recent round of Indian census to report the availability of one four wheeler in average 108 rural households in Odisha. In the surveyed

geography, the community members reported availability of 4 to 5 vehicles in a village. However, some villages reported availability of fewer vehicles. However, this survey does not represent the average availability of vehicles in various villages in other districts with lesser development.

4.2 Willingness to Volunteer Vehicles

Among the owners or drivers of three and four wheelers, the survey found that 75 percent of four wheelers and 78 percent of the three wheelers were interested to volunteer their vehicles (Table 1)

Table 1: Willingness among vehicle owners or drivers to volunteer vehicles

Vehicle category	Number	Response	
		Willing to volunteer	Unwilling to volunteer
Four wheeler	40	30	10
Three wheeler	18	14	4

4.3 Motivation to Volunteer Vehicles

The intervention plans two types of incentives – reimbursement and social recognition. Accordingly, the field investigators enquired the motivating factors among the vehicle owners or drivers interested to volunteer vehicles. Some respondents shown reimbursement as their primary interest, while many others wanted to volunteer their vehicles for a social cause. For example, one respondent said,

"... Money can be earned every day, but getting blessing from the poor and needy is more precious..."

Another respondent shown interest to volunteer her vehicle through this intervention, as she said,

"I am taking this opportunity as a dharma because they are our kin and kith hence we should not forget to support them irrespective of caste, creed and religion without delay"

5. Conclusion

The survey indicated that vehicle owners or drivers in the proposed ICARE intervention shall be willing to devote their time and effort to carry beneficiaries to health facilities for an additional earning or for social recognition. These initial findings forms the foundation for implementing the ICARE intervention on a pilot basis in a selected area in rural north India.

The proposed pilot shall call for implementation of the ICARE web portal which shall allow submission and retrieval of data on vehicles, owners, drivers, health workers, and health facility. The pilot shall also require establishment of a call centre which shall allow the call centre executive to receive requests for vehicles over phone, search for vehicles, and assign the vehicles. The pilot project shall evaluate the effectiveness of ICARE in providing vehicles at time and cost comparable to the government ambulances.

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