Investigating cross-national heterogeneity in the adoption of online hotel reviews

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ABSTRACT

Increasing reliance of potential guests on online hotel reviews has given rise to trepidation among some hospitality managers recently, thus necessitating a better understanding of its adoption. Literature on multicultural studies have suggested that behavioral models do not universally hold across cultures. In view of the limited generalizability and applicability of extant cross-cultural studies to this context, this study generates cross-national insights into the antecedents of travelers' intention to use online hotel reviews to better understand the use of consumer-generated reviews across cultures. Generally, the predictive power of the model derived from the Motivation Theory and TAM holds true for both the United States and Singapore. Nonetheless, tests for structural invariance reveals some noteworthy differences between the two countries. The results highlight the complex cognitive mechanisms determining the acceptance of online hotel reviews in each country as moderated by national culture orientations. Findings hold implications for practitioners and researchers as they navigate through social media in different cultural contexts.

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1. Introduction

The rapid surge in the use of the Internet is indubitably one of the most incredible developments in the last few decades. Internet World Stats (2015) estimates that nearly three-and-half billion people are currently using the Internet globally, representing over 700 percent growth in a decade. This development has had profound implications for hospitality and tourism industries, as travelers increasingly depend on the Internet for travel information search and purchase decision making, hotel booking and electronic word-of-mouth communications, among many others (Xiang and Gretzel, 2010).

Along with this development is the growing popularity of consumer-generated reviews and social media. Consumers are increasingly using these applications for various tasks – entertainment, social networking, media sharing, product reviews, etc. (Yang, 2013). Of growing concern to hospitality managers, is potential customers' reliance on consumers' opinions and reviews of hospitality and tourism products and services for their purchase decision making (Ayeh et al., 2012; Sparks and Bradley, 2014).

This phenomenon has led to increased consumer empowerment (Niininen et al., 2007) as hospitality managers contend with the challenges emerging from travelers' use of consumer-generated review sites like *TripAdvisor*, *CTrip*, and *Independent Traveler*, among several others.

Responding to this phenomenon requires hospitality firms and managers of consumer-generated review platforms to develop a more profound understanding of the determinants of usage. Accordingly, much debate has been offered by researchers and practitioners alike on strategies applicable for triggering consumer behavior towards consumer-generated reviews and social media (e.g., Ayeh et al., 2013; Casaló et al., 2011; Di Pietro et al., 2012; Filieri, 2015; Sparks and Bradley, 2014; Yang, 2013). However, empirical assessment of online technology adoption is ostensibly susceptible to cross-sectional heterogeneity, leading some scholars to question whether technology adoption is analogous across different national cultures (e.g. Lee, 2013; McCoy et al., 2007). In this regard, considerable research has been directed towards understanding the adoption of various online technologies across cultures (Ashraf et al., 2014; Sabiote-Ortiz et al., 2016; Sia et al., 2009; Straub et al., 1997). However, cross-cultural studies on consumer-generated reviews tend to focus on how consumers provide online reviews about movies and non-tourism related products (e.g., Chu and Choi, 2011; Fang et al., 2013; Koh et al., 2010) with inadequate attention given to the possible cultural effects on

the acceptance of online hotel reviews. Even though, research on the impact of culture on technology acceptance in other contexts offer a valuable viewpoint, travel-related consumer-generated reviews undoubtedly has a special character. For instance, while extant research suggests that cultures with emphasis on uncertainty avoidance tend to use electronic media less often (Ashraf et al., 2014; Straub et al., 1997), this is expected to differ in the case of travel reviews, given the fundamental role played by online hotel reviews in reducing the uncertainties of travelers during the travel planning process. Thus, support for the determinants of usage in this specific context remains ambivalent due to limited generalizability of existing cross-cultural studies.

Accordingly, the underlying psychological processes defining travel consumers' conative responses to using online hotel reviews are not well understood in cross-national contexts. Against this backdrop, this study attempts to generate cross-national insights into the cognitive mechanisms driving attitudes and intention to use online hotel reviews for travel planning. Applying a multi-group structural equation modelling (SEM) technique of maximum likelihood, this study draws on data from a survey of online travel consumers from two countries with distinct national cultures to verify if parameters differ. Employing the Motivation Theory (Deci, 1975; Davis et al., 1992), the Technology Acceptance Model [TAM] (Davis, 1989) and Hofstede's (1980) cultural dimensions as theoretical lenses, we seek to understand the following important research question:

RQ: *What are the differences between the United States and Singapore regarding the antecedents of travelers' intention to use online hotel reviews?*

The paper is organized as follows: in the next section, the theoretical aspects of the model are presented, including a discussion on the drivers of online acceptance of hotel reviews. Thereafter, the measures used to capture the latent variables in the model are described. Procedures for data collection and analysis are also explained. The empirical results are then presented with the final section concluding the paper and discussing some implications for theory and practice. Comparing groups of respondents from the US and Singapore is beneficial from both practical and theoretical perspectives. Most importantly, understanding group specific effects facilitates obtaining further differentiated findings. Failure to consider these differences can be a threat to the validity of SEM results as it could lead to incorrect conclusions (Hair et al., 2014).

2. Theoretical background and conceptual model

2.1. Antecedents of intention to use consumer-generated reviews

Measuring and predicting user acceptance and attitudes towards technology-based services have received considerable attention from both academics and practitioners in recent years (Park et al., 2015). Consequently, numerous theoretical perspectives on the antecedents of intention to use technology-related applications have been proffered. Among these, the TAM (Davis, 1989) has proven to be the most prevalent theory for explicating the process by which people use particular technologies and services in various fields. Developed from the Theory of Reasoned Action (Ajzen and Fishbein, 1980), TAM proposes that the acceptance or otherwise of information communication technologies are determined by users' beliefs and attitudes. The theory posits that the perceived usefulness and ease of use of a specific information system (IS) or service are the fundamental determinants of attitudes toward and intentions to use (Davis, 1989; Davis et al., 1989). Perceived usefulness is defined as "the degree to which an individual believes that using a particular system would enhance his/her job performance" (p. 320). Perceived ease of use, on the other hand,

describes "the degree to which an individual believes that using a particular system would be free of physical and mental efforts (Davis, 1989). Although, there have been latter extensions of the TAM, such as the TAM 2 and the Unified Theory of Acceptance and Technology use (UTAUT), the classical TAM was chosen as a theoretical lens to understand the intention to use online hotel reviews for trip planning due to its parsimony and widely recognized success in predicting user attitudes and acceptance of specific technologies and services.

With regards to the current research, perceived usefulness describes travelers' cognitive beliefs that using online hotel reviews will enhance their travel planning while ease of use is defined as the extent to which online travel consumers feel free from engaging in mental and physical efforts when using the hotel review platform to plan holidays. Several studies in various settings offer considerable evidence for the parsimony, theoretical soundness, and robustness of TAM in predicting technology acceptance behaviors (Gefen et al., 2003; Park et al., 2015; Van der Heijden, 2004). In online contexts, the theory has been employed to examine acceptance of various applications, such as e-learning (e.g. Persico et al., 2014), video-sharing websites (Cha, 2014), mobile social network games (Park et al., 2014), Web (Chen et al., 2002; Moon and Kim, 2001), virtual stores (Chen et al., 2002; Gefen et al., 2003), and electronic commerce (Ashraf et al., 2014).

In hospitality settings, Morosan (2012) applied the TAM to the adoption of biometric systems in hotels and confirmed that perceived usefulness and ease of use are salient factors that affect guests' attitudes and intentions. Similarly, Kim et al. (2008) found perceived usefulness and ease of use important in determining the acceptance behavior of hotel front office systems. Other scholars have studied restaurant computing systems (Ham et al., 2008); self-service technologies (Lee, 2013) information technology in upscale hotels (Lam et al., 2007) as well as social media/consumer-generated media (Ayeh, 2013; Ayeh et al., 2013; Casaló et al., 2011; Di Pietro et al., 2012; Munoz-Leiva et al., 2012) and found the theory influential in helping to explain attitudes and intentions towards technology-related services in the industry. Thus we conceptualize perceived usefulness and ease of use as antecedents of attitudes and intention to use online hotel reviews.

2.1.1. Motivation theory

Deci's (1975) motivation theory postulates that people engage their efforts as a result of intrinsic and extrinsic motivation. Davis et al. (1992) illustrate that perceived enjoyment is an intrinsic motivation for the intention to use information systems or services. Since consumer-generated review platforms could be regarded as complex hedonic systems (Ayeh, 2013), perceived enjoyment of the online review platform might be an important determinant of use. Intrinsic motivation is understood as the perception that individuals would want to perform an activity "for no apparent reinforcement other than the process of performing the activity *per se*" (Davis et al., 1992, p. 1112). Therefore, intrinsic value represents the perceived enjoyment linked with the use of a specific technology in itself, rather than the potential performance outcome of using such a technology.

Taking into account the purpose of this study, the current research defines perceived enjoyment as the degree to which the act of using the online hotel review platform for travel planning is believed to be enjoyable in its own right barring the instrumental value of the application. A number of studies related to intrinsic motivation suggest that perceived enjoyment is one of the prime determinants of intention to use particular services (Van der Heijden, 2004; Venkatesh, 2000). Other studies have also confirmed positive relationships between perceived enjoyment and attitude (Di Pietro et al., 2012; Ha and Stoel, 2009; Shin, 2010) as well as ease of use (Ryan and Deci, 2001; Venkatesh, 2000). Hence we include