Mobile social tourism shopping: A dual-stage analysis of a multi-mediation model

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HIGHLIGHTS

- SOR framework was adapted to investigate mobile social tourism shopping.
- Data was collected from a UNESCO World Cultural Heritage Site in Penang, Malaysia.
- A dual-stage analysis was performed with PLS-SEM and Artificial Neural Network.
- A multiple mediation analysis was conducted.
- Tourists might have social network fatigue under mobile social tourism platforms.

ARTICLE INFO

ABSTRACT:

This study investigates mobile social tourism (MST) shopping, which refers to the use of MST platforms in shopping for tourism products and services, among Malaysian domestic tourists who have visited George Town, which is a UNESCO World Cultural Heritage Site located in Penang. Drawing upon the Stimulus-Organism-Response (SOR) framework, a multi-mediation model is proposed to address this relatively new research avenue. Through the use of Partial Least Squares Structural Equation Modelling and Artificial Neural Network analyses, it was discovered that the environmental stimuli (i.e., perceived mobility, social presence, and system and service quality) directly and indirectly influence tourists' MST shopping intention through their inner organism changes (i.e., perceived usefulness and perceived enjoyment). The results support the application of the SOR framework in MST shopping, as most of the developed hypotheses are supported. Practical and theoretical implications are subsequently discussed in light of the results.

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1. Introduction

The rise of low-cost carriers in recent years has promoted the tourism industry to greater heights (Escobar-Rodríguez & Carvajal-Trujillo, 2014). Thus, it is unsurprising to see that the economic growth and development of some countries are now greatly dependent on tourism (Webster & Ivanov, 2014). Without exception, Malaysia, a country in Southeast Asia, has experienced the benefits offered by tourism in recent years. By 2020, it is forecasted that the tourism industry will contribute RM 3 billion weekly towards the Malaysian economy (Hew, Lee, Leong, Hew, & Ooi, 2016). Given its significant contribution, Malaysian government emphasised tourism as a key economic area under the Tenth Malaysia Plan (Prime Minister's Department, 2010), and further prioritised it as one of the key initiatives for the regional economic corridors under the Eleventh Malaysia Plan (Prime Minister's Department, 2015). As opined by Kozak and Kozak (2013), the prosperity of the Malaysian tourism industry is mainly attributed to the wide range of tourism products and services (TPS) that it offers.

TPS, as defined by several researchers (Cosma, Bota, & Tutunea, 2012; Kim, Chung, & Lee, 2011; Kim, Chung, Lee, & Preis, 2016; Tan, Lee, Lin, & Ooi, 2017), mainly include accommodations, entertainment (such as festivals, events, and theme parks), transport, and rental services. The purchasing of TPS online is a new phenomenon in the tourism industry (Kim et al., 2011), and it allows tourists to

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enjoy the benefit of lower costs (Jensen, 2012; Kim, Lee, Chung, & Kim, 2014). This phenomenon has been referred to as "online tourism shopping" by some researchers (Kim, Chung, Lee, & Kim, 2012; Kim, Lee, & Chung, 2013). Afterward, tourists started adopting smart mobile devices, such as smartphones, as a tourism travel tool in purchasing TPS (Dickinson et al., 2014; No & Kim, 2014), which has been termed "mobile tourism shopping" by Kim, Chung, Lee, and Preis (2015). Lately, given the explosion of online social networks, tourists are embracing online social networks and smart mobile devices for tourism-related purposes (French, Luo, & Bose, 2017; Kim, Chung, et al., 2016; Kim, Lee, & Bonn, 2016).

There are two main types of online social networks that serve as platforms for tourists to conduct their tourism-related tasks, including the purchase of TPS. Networks of the first type are specifically designed for tourism-related purposes, such as AirBnB and TripAdvisor. French et al. (2017) referred to online social networks of this type as social networking tourism sites, and opined that they could allow tourists to share TPS among themselves without going through traditional travel agencies. In contrast, networks of the second type are not designed specifically for tourism-related purposes. For instance, Tourism Malaysia, a promotion board under the Ministry of Tourism and Culture, has been leveraging YouTube and Facebook as platforms for promoting tourism activities and products (Musa & Thirumoorthi, 2016). Hence, tourists are utilising online social networks that are not mainly designed for tourism purposes to purchase TPS as well. Accordingly, purchasing TPS via online social networks follows the latest trend among tourists. Malaysian tourists are also heavily relying on online social networks to facilitate their decision making in the purchase of TPS (Zainal, Harun, & Lily, 2017).

Considering the proliferation of smart mobile devices and the current popularity of mobile applications (Hew, 2017; Hew, Lee, Ooi, & Wei, 2015), it is rather common to see social networking tourism sites and online social networks go mobile by developing and offering their own mobile applications. In this study, these mobile social networking tourism sites (such as AirBnB and TripAdvisor) and mobile online social networks (particularly those that can facilitate the purchase of TPS, such as Facebook) are referred to as mobile social tourism (MST) platforms. Furthermore, the use of these platforms to shop for TPS is termed MST shopping in this study. Noting the importance of mobile applications, Ismail, Kadir, Aziz, Mokshin, and Lokman (2016) proposed a mobile application with a social element to help tourists search for tourism spots and TPS in Malaysia, which has subsequently assisted Tourism Malaysia in promoting Malaysia at the national and international levels. Tan et al. (2017) also agreed on the importance of mobile applications (especially those with a social element) in the Malaysian tourism industry, and they observed that Malaysians are currently adopting mobile applications for purchasing TPS. Given the current literature and status quo in the Malaysian tourism industry, MST shopping remains an emerging avenue that urgently needs attention.

Although numerous past studies have focused on online tourism shopping (Hsu, Chang, & Chen, 2012; Jensen, 2012; Kim et al., 2012, 2011; Kim, Lee, et al., 2013), mobile tourism shopping (Kim et al., 2015), and the use of online social networks in tourism (French et al., 2017; Kim, Chung, et al., 2016; Kim, Lee, et al., 2016), these studies have mostly been conducted with a single stage of analysis, mainly by means of Covariance-Based Structural Equation Modelling or Variance-Based Structural Equation Modelling, and have omitted a proper mediation analysis of the mediator(s) in their models. Contemplating these research gaps, this study aims to present more refreshing insights into the current state of tourism research by performing a dual-stage analysis and evaluating the roles of multiple mediators via multiple mediation analysis.

Based upon the notion of the Stimulus-Organism-Response (SOR) framework (Mehrabian & Russell, 1974), this study attempts to shed light on MST shopping through a multi-mediation model, which considers perceived mobility, social presence, and system and service quality as the environmental stimuli; perceived usefulness, perceived ease of use, and perceived enjoyment as the inner organism changes; and MST shopping intention as the response. With this multi-mediation model, we are confident that MST shopping can be adequately explained in this study.

It is hoped that the fresh insights of this study will eventually benefit Malaysian practitioners and policy makers in the tourism industry. Government policy makers, and perhaps mobile app developers in the tourism industry, could make more informed decisions and derive better strategic plans for fostering MST shopping among tourists, which eventually encourages spending by tourists. The tourism industry carries significant weight for a country, as it represents one of the main and most important revenue sources, particularly for Malaysia (Hew, Lee, Leong, et al., 2016). With the enormous spending power of tourists, countless business opportunities are available for practitioners such as hoteliers. This, in turn, benefits the government in terms of tax revenues and creates more job opportunities. Hence, advocating MST shopping among tourists could have huge implications for the society, nation, and economy.

2. Literature review

2.1. MST shopping

According to a review conducted by Xiang, Magnini, and Fesenmaier (2015), tourists once relied on intermediaries, such as tour operators and travel agencies, to purchase TPS during their travels. Hence, their choices of TPS were rather limited during the pre-Internet era (prior to 1990). Similarly, practitioners had limited ability to reach tourists. Due to the advancement of Internet technology, online social networks, and smartphones in recent years, tourists have more control over their choices of TPS. Further, practitioners have acquired wider access to tourists. Utilising online social networks to market TPS has been validated as an effective strategy (Zeng & Gerritsen, 2014). Owing to the incredible speed at which posts spread on online social networks, which eventually influences buying decisions in a significant manner, purchasing TPS through online social networks is quite different from purchasing through traditional channels (Kim, Lee, et al., 2016). According to Shankar et al. (2016), who discovered that the use of mobile online social networks in shopping activities has been accelerating among shoppers lately, tourists are heavily relying on mobile online social networks to facilitate their TPS shopping.

2.2. Applying the SOR framework

The SOR framework (Mehrabian & Russell, 1974) has been applied by researchers in different retailing contexts to explain the decision-making process of consumers (Kim & Lennon, 2013). In addition to being utilised widely in the online environment, the SOR framework has been employed to explain purchase intention in online social networks (Zhang & Benyoucef, 2016). Nonetheless, this framework has yet to be applied in the setting of tourism shopping. Hence, it would be interesting to explore the suitability of this framework in the context of MST shopping. Based upon the SOR paradigm, the environmental stimuli could arouse individuals, hence affecting the internal organismic states that mediate their approach or avoidance responses in the online shopping environment (Eroglu, Machleit, & Davis, 2001).

The stimuli in the SOR framework are a set of attributes that