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The Role of Compatibility, Information Quality and e-Service Quality in Predicting Mobile Hotel Booking Adoption: A Conceptual Framework

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Abstract

Due to sophistication and advancement of portable devices such as tablet and smart phone technology, many hoteliers have started to deploy mobile hotel booking facilities. However, the adoption of mobile hotel booking technology among hotel customers is still in its infancy. Therefore, this article proposes a conceptual model to understand mobile hotel booking adoption among hotel customers. Using Technology Acceptance Model (TAM) as underlying theory, the present article proposes three independent variables i.e. 1) compatibility, 2) information quality, 3) e-service quality to influence hotel customers' intention to adopt mobile hotel booking. These variables are mediated by perceived ease of use and perceived usefulness. While the present article is predicted to contribute both theoretically and practically, further empirical study is recommended to test the applicability of the proposed model.

INTRODUCTION

Technological advances has transformed marketing and business strategy, from human-to-human service transactions to human-to-technology service transaction (Rust & Espinoza, 2006). Mobile hotel booking is believed to be provide many advantages, including convenience and time saving. Mainly, the perceived convenience of mobile hotel booking has lead consumer to appreciate the new technology. Besides, the new technology offers more opportunities for the customers to make better decision (Kumar, Kumar, & Rahman, 2015). Recently, mobile hotel booking has started to attract hotel customers' attention in making reservation for hotel accommodation. Mobile hotel booking allows customers to for hotel rooms anytime and anywhere as long as they are connected to the Internet. Therefore, the mobile hotel booking is anticipated to be one of the major distribution channels for the hotel industry. Hotel practitioners are positive about the use of the mobile hotel booking. In establishing and strengthening customer relationships and brand loyalty, the mobile platform will play a key role not only in the distribution of the rooms but also for the people (Anuar, Musa, & Khalid, 2014).

Previous study has found the factors that cause the consumer loyalty in mobile hotel booking. The perspective is determined by different innovation characteristics such as self-efficacy, compatibility, perceived ease of use and perceived convenience (Ozturk, Bilgihan, Nusair, & Okumus, 2015). However, the influencing factors for hotel customer to adopt mobile hotel booking are yet not clearly established (D. Abdullah, Radzi, Jamaluddin, & Patah, 2010). To fulfill this gap, we propose an extension to the well-established Technology Acceptance Model (Davis, 1989), to understand factors influencing hotel customers' intention to use the mobile hotel booking. The

present article proposes a conceptual framework by introducing three predictors as external variables in original TAM. The objective is to investigate the factors that can influence hotel customers to use mobile hotel booking. This study is expected to contribute both theoretically and practically. The next part presents literature review of this study. Then, it followed by a discussion on the conceptual research framework. Finally, in the last section presents the conclusion and recommendation for this study.

LITERATURE REVIEW

Mobile Hotel Booking

According to Wang and Wang (2010), mobile hotel booking is ‘a location based online distribution information system that enables customers worldwide to reserve hotel rooms anytime, anywhere through the use of the wireless Internet, GNSS, GIS, GPS and mobile phones/devices’ (p.598). Due to overwhelming demand for online reservations, hoteliers have launched mobile booking services by integrating mobile phone-based location technology with their property management system (PMS). This technology allows users to find and book nearby hotel accommodation since the technology automatically considers both users’ location and other preferences. This technology is supported by wireless Internet, mobile phone-ID location, global navigation satellite system (GNSS), location based services (LBS), geographic information system (GIS) and global positioning system (GPS). These technologies enable hoteliers to provide more flexible, convenience, cost effective and faster booking services to their customers.

Technology Acceptance Model

Davis (1989) developed new measures to predict user acceptance of computer technology. The new scale contributes to the development of the well-known Technology Acceptance Model. The Technology Acceptance Model or TAM (Davis, 1989) is an extension of the Theory of Reasoned Actions (TRA) (Ajzen & Fishbein, 1975). Based on TRA, a person’s belief associated with the person’s attitude. The person’s attitude influence his or her behavioural intention. The association among these constructs was used in TAM to understand technology adoption behaviour. Two major variables in TAM are perceived ease of use and perceived usefulness. These variables are claimed to mediate the relationship between external variables and user’s attitudes and behavioural intention to adopt a technology. Figure 1 illustrates the association among the variables in TAM.

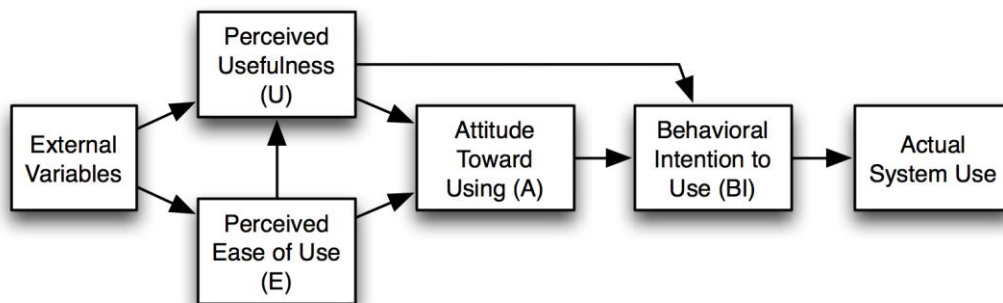


Fig. 1.
Technology Acceptance Model (Davis, 1989)

Since TAM has been widely used in technology adoption research, Abdullah, Jayaraman, Shariff, Bahari, and Nor (2016) proposed the use of TAM to understand the associations between perceived website interactivity (as external variables), perceived ease of used, perceived usefulness and behavioural intention. In their article, perceived usefulness and perceived ease of use are believed to be two dominant predictors of adoption behaviour. Perceived usefulness is used to point out consumer’ perceptions that used the application will increase their productivity (Davis, 1989). In tourist related research, TAM has been used to investigate the influence of technology usefulness, easy to use, adoption risk, and adoption cost on online booking performance among tourists (Özbek, Günalan, Koç, Şahin, & Kaş, 2015). In e-learning, TAM has been used to predict student’s intention to adopt e-portfolio (F. Abdullah, Ward, & Ahmed, 2016).

Perceived Ease of Use

Perceived ease of use is defined as ‘the degree to which a person believes that using a particular system would be free of effort’ (Davis, 1989, p.320). In the context of mobile hotel booking, the present paper defines this construct as an individual perception about the level of difficulty in adopting mobile hotel booking technology.

Previous studies suggested that when customers or users believe that online hotel booking is not difficult or easy to use, the probability for them to adopt the technology will be greater (D. Abdullah, Jayaraman, Shariff, et al., 2016). It is important in establishing tourism industry information because the technology advancement depend on consumer intention to use the mobile hotel booking (Bilgihan, Barreda, Okumus, & Nusair, 2016). Intentions to use mobile hotel booking are positively impact by perceived ease of use (Ozturk et al., 2015)

Perceived Usefulness

Perceived usefulness is defined as ‘the degree to which a person believes that using a particular system would increase his or her job performance (Davis, 1989, p.320). Mobile hotel booking is very useful for consumers since it is very convenience to use. That is why this construct has been widely studied in especially in consumers’ intention (D. Abdullah, Jayaraman, Shariff, et al., 2016; Buaprommee & Polyorat, 2016). In other studies, the importance of perceived usefulness both as the inceptive and later stages of the use of technology have been pointing out through online healthcare service (Mou, Shin, & Cohen, 2016). Perceived usefulness can be the main reason of consumer purchase intention in hotel booking context (Agag & El-Masry, 2016).

CONCEPTUAL FRAMEWORK AND RESEARCH PROPOSITIONS

The present article proposes a conceptual framework developed based on the original TAM as underlying theory. The conceptual framework suggests that the external variables are represented by compatibility, information quality, and e-service quality. These three variables influence mobile hotel booking intention through perceived ease of use and perceived usefulness. However, attitude and actual behaviour constructs were excluded in the proposed framework. The proposed conceptual framework is depicted in Figure 2.

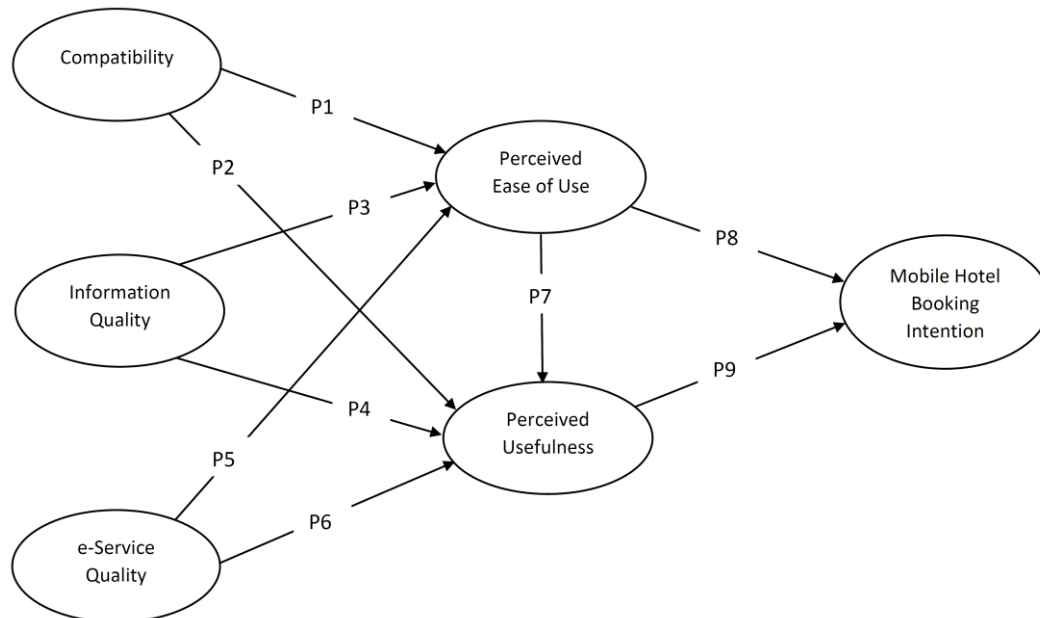


Fig. 2.
The conceptual framework

Compatibility

Compatibility refers to situation where innovations are able to co-exist or occur without conflict or problem with the accepted values, past experiences, and present needs of the user of technology (Rogers, 2003). In technology adoption research, compatibility is a well-known and typical variable to study mobile banking adoption (Wu & Wang, 2005). In this article, compatibility is defined as the degree to which mobile hotel booking technology is perceived as being suitable to the accepted values, past experiences, and individual needs of hotel customers. Previous research found that compatibility of a technology with individual lifestyle and needs is associated with technology adoption (Hanafizadeh, Behboudi, Koshksaray, & Tabar, 2014). In the Internet banking studies, compatibility has been found as the most prominent factor that forms customers’ intentions to adopt online banking technology (Giovanis, Binioris, & Polychronopoulos, 2012). Therefore, the following proposition is developed:

Proposition 1. Compatibility is associated with perceived ease of use of mobile hotel booking technology.

Proposition 2. Compatibility is associated with perceived usefulness of mobile hotel booking technology.

Information Quality

Information quality refers to the value of the information provided to the decision makers like technology users or customers. It is reflected by the quality of content that a system provides. Researchers posited that information quality is a one of the most important features of a web technology, other than reliability, usability and availability of what customer's needs (Azmi, Hamid, Ahmad, & Ramli, 2016; Delone & Mclean, 2003; Kamal, Zawawi, & Abdullah, 2016). Besides, some scholars argued that the measure of information quality was often reflected by technical adequacy (Wang & Wang, 2010). However, in this study information quality is defined as the quality of data provided by mobile hotel booking technology to its users or customers. Scholars have used TAM to understand Knowledge Management System (KMS) adoption (Kuo & Lee, 2009). They explored how external variables (information quality and task technology fit) influence the technology adoption. The study found that information quality has significant direct effect on perceived ease of use and perceived usefulness among KMS users. Therefore, the following propositions are developed:

Proposition 3. Information quality is associated with perceived ease of use of mobile hotel booking technology.

Proposition 4. Information quality is associated with perceived usefulness of mobile hotel booking technology.

e-Service Quality

e-Service quality has been defined as 'overall customer evaluations and judgments regarding the excellence and quality of e-service delivery in the virtual marketplace' (Lee & Lin, 2005, p.162). For the past twenty years, scholars have been reporting the influence of service quality on consumer behaviour. However, recent literature have discussed these findings in the context of e-commerce (D. Abdullah, Hambali, Kamal, Din, & Lahap, 2016; Chang, Wang, & Yang, 2009; Lee & Lin, 2005; Rowley, 2006). For instance, researchers have studied the association among the customer perception on e-service quality, customer satisfaction and customer loyalty (Chang et al., 2009). The scholars found that e-service quality creates customer loyalty through customer satisfaction. On the other hand, research on online shopping found that e-service quality dimensions (web site design, reliability, responsiveness, and trust) significantly related to customer satisfaction and purchase intentions (Lee & Lin, 2005). Based on these findings, the following propositions are developed:

Proposition 5. e-Service quality is associated with perceived ease of use of mobile hotel booking technology.

Proposition 6. e-Service quality is associated with perceived usefulness of mobile hotel booking technology.

Proposition 7. Perceived ease of use is associated with perceived usefulness of mobile hotel booking technology.

Proposition 8. Perceived ease of use is associated with mobile hotel booking intention.

Proposition 9. Perceived usefulness is associated with mobile hotel booking intention.

Mobile Hotel Booking Intention

In the present era of mobile computing, many scholars have begun to pay attention to mobile hotel booking. Hoteliers need to understand why their customers use or not use their mobile booking service. Hoteliers need to analyse the conversion rate of their mobile hotel booking service. By doing so, marketing efforts can be better administered to increase the mobile booking adoption. For example, from customer perceived value point of view, Wang and Wang (2010) studied mobile hotel booking adoption from in Taiwan. The scholars reported that information quality and system quality were the two major predictors to customer's adoption of mobile hotel reservation. Thus, following Wang and Wang (2010), this article also aim to predict customers intention to adopt mobile hotel booking. In this article, mobile hotel booking intention defined as the likelihood that hotel customers to use mobile hotel booking service to reserve hotel accommodation.

CONCLUSION AND RECOMMENDATION*Implication to Theory and Practices*

This paper proposes a conceptual framework to understand mobile hotel booking website adoption. Using TAM as theoretical foundation, this article proposes three important predictors to technology adoption, namely 1) compatibility, 2) information quality, and 3) e-service quality. These are expected to have significant influence on mobile hotel booking intention through perceived ease of use and perceived usefulness as mediators. From the theoretical point of view, this framework contributes by conforming the original TAM in mobile online

setting. The three predictors (compatibility, information quality, and e-service quality) are proposed as external variables that can influence customer perception on technology ease of use and technology usefulness. For practitioners, hoteliers or marketers could be able to predict their customers' behavioural intention to adopt their mobile booking technology. Specifically, they will be able to evaluate 1) to what extent they have deployed a booking technology that is compatible to the needs of their customers, 2) to what extent they have provide quality information on their mobile booking website, and 3) to what extent they have offered e-service quality on their mobile hotel booking platform. Thus, hoteliers can improve their return on marketing and return on technological investment. For hotel customers, mobile hotel booking service give them many benefits such as convenience, quick responses and better accessibility to hotel booking service (D. Abdullah, Jayaraman, & Kamal, 2016). Compared to the traditional online booking option, customers have to perform the reservation process at specific location. By using the mobile hotel booking service, the consumer can book a hotel room instantly anytime and anywhere because the system operates for 24 hours a day and 7 days a week. This article is conceptual in nature. Although the association among the constructs in the proposed conceptual framework are supported by previous studies, further empirical testing is recommended for future research.

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