What Influences Travellers’ Adoption of a Location-based Social Media Service for Their Travel Planning?

Alain Yee-Loong Chong  
*University of Nottingham, alain.chong@nottingham.edu.cn*

Eric T.W. Ngai  
*Hong Kong Polytechnic University, eric.ngai@polyu.edu.hk*

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WHAT INFLUENCES TRAVELLERS' ADOPTION OF A LOCATION-BASED SOCIAL MEDIA SERVICE FOR THEIR TRAVEL PLANNING?

Alain Yee-Loong Chong, Nottingham University Business School China, University of Nottingham, Ningbo campus, China, alain.chong@nottingham.edu.cn

Eric T.W. Ngai, Department of Management and Marketing, Hong Kong Polytechnic University, Hong Kong, eric.ngai@polyu.edu.hk

Abstract

Advances in location-acquisition and mobile communication technologies have empowered people to use location data with online social networks known as location-based social media. However, the technology is relatively new, and literature on the relevant factors determining location-based social media adoption and usage for the specific purpose of travel planning is sparse. Using the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) as a base model, we extended the model by including users’ mobile Internet experience and the Information Adoption Model in the context of location-based social media adoption and use for travel planning. Data was collected from 200 Chinese respondents and partial least square was employed to test the research model. Our results showed that our model was able to explain about 64% of variance in intention and 48% in location-based social media use in travel planning. We found that besides variables from UTAUT2, argument strength, review rating, reviewer trustworthiness, reviewer expertise and review sidedness can influence users’ adoption of online reviews, which in turn will influence their use of location-based social media. The results of this study will be useful for location-based social media providers in formulating appropriate marketing strategies, as well as developing applications that will attract more users.

Keywords: Location-based social media, consumer decisions, technology acceptance
1 INTRODUCTION

Mobile Internet and mobile commerce have captured the attention of both practitioners and researchers due to their potential impact on business and industry (Chong, 2012). Unlike e-commerce, mobile Internet offers the advantage that users can go online anytime, anywhere. With better and faster mobile Internet bandwidth, it is common for consumers to use their mobile devices to search for product and service information, and to conduct mobile commerce-related activities. A recent report by comScore, an Internet marketing research company, finds that web searches on desktops declined in September 2012 while Internet search traffic coming from smartphones and tablets is growing. The growth of mobile Internet suggests that mobile commerce has the potential to overtake e-commerce as the medium through which consumers conduct their online transactions and purchases.

Despite the growing interest in mobile commerce, recent findings by Mobile Tech Penetration as well as China Internet Network Information Center (CINIC) indicate that most mobile users are still using their mobile devices for activities related to text messaging, music searching and downloads, and mobile game playing. One advantage of mobile commerce when compared to e-commerce is the ability to offer location-based services. However, location-based services are still considered to be relatively new, and the adoption of the services is still quite low (Zhou, 2012). Location-based services include many offerings for consumers such as finding friends (e.g. What’s Up), updating one’s location for friends on a social network (e.g. Facebook), and advertisements (e.g. AdLocal). One promising area of location-based service is the customization of products and services search results based on travellers’ locations (Buettner, 2013). Most travellers today have the option of replacing their maps with digital maps on their mobile devices through Global Positioning Systems (GPS). GPS is now available on most smart phones. The advantage of using GPS when compared to a traditional map is the ability to help travellers navigate by tracking their current position, and by providing real-time directions and information about nearby attractions to travellers. However, with the emergence of mobile Internet, companies are able to extend location-based services by integrating them with social media services. Location-based social media allows consumers to receive recommendations for nearby attractions, read reviews and ratings by other consumers, and enables them to provide reviews and ratings of attractions (Gaio, 2011). Examples of this include the FourSquare, Facebook’s Nearby, Google plus and Yelp. Using location-based social media, consumers can search for nearby attractions, and by identifying the consumer’s location, the application is able to provide a list of potential destinations (e.g. restaurants or museums), and the reviews of these attractions which are generated by other consumers.

When travellers rely on the search results from location-based social media applications, the consumer-generated reviews that accompany the results can significantly influence their decisions (Zhu and Zhang, 2010). This is because travellers may be new to the location and will rely on others’ opinions for decision-making and therefore are more likely to trust their peers’ opinions than to rely on marketer-initiated sources (Ludwig et al., 2013).

Although location-based social media is increasingly popular and has enormous potential for businesses, overall adoption of these services is still relatively low. Ayeh et al. (2012) stated that in travel planning, for example, many Internet users are not yet utilizing consumer-generated media such as consumer reviews for their travel planning. A recent report by DCCI, a Chinese Internet research company, found that only 7 percent of mobile phone users in China use mobile location-based services. China has one of the largest numbers of mobile phone users, and this presents great opportunities for businesses and location-based social media application providers (Chong, 2012). The low utilization of location-based social media service can be caused by various factors. Firstly, it could be related to issues involving consumers’ willingness to adopt the location-based mobile service during their travel. Some
questions such as the cost of 3G roaming service and the perceived usefulness of the application can play a role in consumers’ adoption decisions. Secondly, location-based social media offer consumers’ reviews and ratings which affect their decisions to choose the travel and attraction recommendations. However, current research on online reviews offers little guidance as to why consumers will purchase based on the reviews (Ludwig et al., 2013). In particular, there are almost no studies which focus on online reviews in the context of location-based social media. Analysts have also stated that location-based social media have been talked up several times in the past only to yield disappointing results (Economist, 2010). Understanding the determinants of consumers’ utilization of location-based social media applications is important for businesses as these applications are an important and emerging tool for companies’ marketing strategies. One industry in which location-based social media can play a major role is the travel industry. Location-based social media enables travel-related companies to promote their products and brands, gets people on social networks involved and motivated to travel, and allows the targeting of key market segments. Location-based social media such as Foursquare allows users to deliver “word-of-mouth” marketing for businesses, which is one of the most important influencers when it comes to consumers’ travel decisions. A recent survey by Tourism-Review.com indicates that more than two thirds of travellers today state that traveller reviews websites are influential and important when planning leisure trips. The main aim of this paper is to examine the factors that influence travellers’ adoption of location-based social media services for their travel planning. The theoretical basis of this paper derives from the integration of a modified Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) and the Information Adoption Model (Venkatesh et al., 2012). The paper is organized as follows. First, we will review the existing literature and present the hypotheses proposed and research model. We then explain the methods employed in this study as well as discuss our research findings. Finally, the conclusion and implications of the study are presented.

2 Theoretical background and hypothesis development

2.1 Technology adoption and location-based social media adoption for travel planning

Previous studies have examined the adoption of location-based services (Kaasinen, 2005) or social media adoption (Ayeh et al., 2012) for travel planning. However, research on the integration between the two technologies resulting in the emergence of location-based social media applications remains sparse. With mobile technologies increasingly common among consumers, location-based social media applications have the potential to transform the travel industry and the way in which consumers plan their travels. Given that location-based social media applications are still relatively new and their adoption is still low (Economist, 2010), it is important for companies as well as location-based social media application providers to understand the factors that will determine travellers’ adoption of location-based social media applications in their travel planning.

Previous studies on location-based services for travel planning (Kassinen, 2005) and social media (Aye et al., 2005) have used the Technology Acceptance Model (TAM) (Davis, 1986) as their base model. However, Venkatesh et al. (2003), in reviewing eight different theories and models in technology use, developed the UTAUT which was able to explain about 70 percent of the variance in behavioral intention to use a technology and about 50 percent of the variance in technology use (Venkatesh et al., 2012). The UTAUT has been applied to study a wide range of technologies such as course management software (Marchewka et al., 2007), Internet banking (AbuShanab and Pearson, 2007) and e-commerce (Uzoka, 2008). However, the UTAUT was developed mainly to study the use of technology in the organizational context. Venkatesh et al. (2012) developed the UTAUT2, which extended the UTAUT by incorporating additional three variables, namely Hedonic Motivation, Price Value and Habit to study consumer technology use. The UTAUT2 is more appropriate in the context of this
study as this research focuses on consumer use of technology instead of organizational use. Furthermore, the UTAUT2 was tested on mobile Internet, which shares similar technological characteristics with location-based social media. Accordingly, the UTAUT2 provides a suitable theoretical framework for understanding the antecedents of travellers’ intention to use as well as actual use of location-based social media for their travel planning. This also follows the call by Venkatesh et al. (2012) for future research to test the UTAUT2 for different technologies. In this research, we will use a modified UTAUT2 as a base model and extend it to include factors related to online reviews based on the information adoption model. Unlike the original UTAUT2, this research has excluded the interaction effects of age, gender and experience. Experience is instead measured using users’ mobile Internet experience, and direct relationships are proposed between mobile Internet experience and behaviour intention and actual use of location-based social media. The next sections will discuss hypotheses related to integrating the modified UTAUT2 with the Information Adoption Model in the context of location-based social media for travel planning.

2.1.1 Performance expectancy

Performance expectancy is defined as the degree to which using location-based social media will provide benefits to travellers in their travel planning (Venkatesh et al., 2012; Ayeh, 2012). Existing studies by Huh et al. (2009) and Ayeh et al. (2012) have shown that performance expectancy is an important antecedent of technology usage in a tourism setting. Travellers have the option of using traditional maps and conducting searches on the Internet (Xiang and Gretzel, 2010) before planning their travels. However, using location-based social media in their travel planning would mean searching for nearby attractions based on their current positions and taking into consideration the ratings and comments given by other travellers when choosing the attractions. Therefore, performance expectancy relates to whether the travellers find information offered by location-based social media to be useful in their travel planning and decision making. The following hypothesis is accordingly formulated:

H1 Performance expectancy has a significant and positive relationship with a traveller's intention to use location-based social media for travel planning.

2.1.2 Effort expectancy

Effort expectancy is defined as the degree to which travellers perceived location-based social media as being easy to use (Ayeh et al., 2012). Although consumers today are familiar with their mobile devices (Chong, 2012), using location-based social media requires some additional steps such as connecting to their GPS, and, if they are travelling abroad, connecting their 3G services through roaming, ensuring that the needed applications are available in the destination area (which could be a foreign country), and so forth. Thus, unlike planning travel through the Internet, it is still relatively unclear whether using location-based social media in travelling planning is user-friendly, time saving and convenient for travellers. Travellers’ adoption decisions will depend on whether they perceive location-based social media as being easier to use when compared to alternatives such as using websites to plan their travels. The following hypothesis is therefore proposed:

H2 Effort expectancy has a significant and positive relationship with traveller's intention to use location-based social media for travel planning.

2.1.3 Social Influence

Social influence in this research is defined as the extent to which the travellers are influenced by important others such as family and friends in using location-based social media in their travel planning (Venkatesh et al., 2012). In the original UTAUT model, social influence was found to have no significant direct relationship with the behavioural intention to adopt a
technology, while it was significant when moderators such as gender, age, voluntarism, and experience were included. However, it should be noted that UTAUT was not tested in the context of technology use by consumers, and when tested in UTAUT2, the relationship was found to be significant. Interpersonal influence and word of mouth as a result of location-based social media are considered as important sources of information when consumers are making purchasing decisions (Litvin et al., 2008). When using location-based social media in travel planning, travellers will be able to see comments and reviews by people within their social network, and this in turn may play a crucial role in their travel decisions. Google Plus for example, allows travellers to look at reviews by their “circle of friends” on nearby attractions such as restaurants. Hence, this research hypothesizes that:

H3 Social influence has a significant and positive relationship with a traveller's intention to use location-based social media for travel planning.

2.1.4 Facilitating conditions

Facilitating conditions are defined by Venkatesh et al. (2012) as consumers' perceptions of the resources and support available to perform a behaviour. When using location-based social media for travel planning, a traveller will need basic resources such as the mobile device and mobile Internet connections (e.g. 3G, WiFi), as well as knowledge and support from others if encountering difficulty when using the technology. Facilitating conditions play an important role for travellers as they may be using location-based social media in a new environment which may or may not provide facilities such as Internet connections, and they may also need to make ad hoc travel decisions when using the application. In UTAUT, facilitating conditions were theorized to determine the technology use. In UTAUT2 however, facilitating conditions were examined and found to influence the behavioural intention to use a technology as well as the actual technology usage. As this study adopts the UTAUT2 instead of the UTAUT, we examined the relationships between facilitating conditions and both behavioural intention to use location-based social media as well as actual use. We therefore hypothesize that:

H4a Facilitating conditions have a significant and positive relationship with a traveller's intention to use location-based social media for travel planning.

H4b Facilitating conditions have a significant and positive relationship with a traveller's actual use of location-based social media for travel planning.

2.1.5 Hedonic motivation, price value, habit, and experience

The UTAUT was extended by Venkatesh et al. (2012) in their study of consumer use of technology by incorporating hedonic motivation, price value and habit. Hedonic motivation is defined as the fun and pleasure derived from using location-based social media. Hedonic motivation has been found to be an important antecedent of social networking tool usage (Lin and Lu, 2011) and mobile technology usage (Dickinger et al., 2006). In the case of location-based social media for travel planning, travellers will interact with people in the social network, as well as leaving ratings and comments after visiting the attraction, and therefore there is an element of fun and pleasure in using the application. The following hypothesis is therefore proposed:

H5: Hedonic motivation has a significant and positive relationship with a traveller's intention to use location-based social media for travel planning.

Following the definition from Venkatesh et al. (2012), price value is the consumers' “cognitive tradeoff” between the perceived benefit of the applications and the monetary cost of using them” (pp. 161). Unlike organizational technologies, the cost of using location-based
social media is incurred by the consumers. The cost involved in location-based social media includes the mobile Internet connection cost (e.g. the roaming cost if travelling in a different country) and the cost of purchasing smartphones. The price value is positive if travellers perceive the benefits of using location-based social media to be greater than the monetary cost. Thus, this study hypothesizes that:

H6: Price value has a significant and positive relationship with a traveller's intention to use location-based social media for travel planning.

Habit is defined as the extent which a person performs a behaviour automatically as a result of learning (Limayem et al., 2007; Venkatesh et al., 2012). Past information systems adoption studies by Morris et al. (2005) and Venkatesh et al. (2000) have supported the notion that habit is a predictor of information systems continued usage. In the context of location-based social media, it is possible that users have developed the habit of seeking information from social media, and this habit extends to the habit of using location-based social media when planning travel. Findings from Venkatesh et al. (2012) showed that habit has a significant relationship with consumers' behavioural intentions and actual use of mobile Internet. This research therefore hypothesizes that:

H7a Habit has a significant and positive relationship with traveller's intention to use location-based social media for travel planning.

H7b Habit has a significant and positive relationship with traveller's actual use of location-based social media for travel planning.

2.2 Consumer Mobile Internet Experience

The Internet reduces consumers' search costs significantly and those with greater Internet experience are far more likely to use online channels to collect product and service information due to the lower cost when compared to offline channels (Zhu and Zhang, 2010). Travellers who use the Internet for travel planning are also more likely to reduce their search costs. Novotny (2004) found that when searching for information using the Internet, users who lack Internet experience often abandon using the Internet as an information source. Similarly, Weiser (2000) also found that Internet experience has a positive correlation with a consumer's frequency of using the Internet to collect information as well as their level of confidence with Internet use (Bart et al., 2005). In this research, we believe that those who have used mobile Internet are more likely to use location-based social media for their travel planning. Hence, the following hypotheses are formulated:

H8a Consumer Mobile Internet experience has a significant and positive relationship with a traveller's intention use of location based social media for travel planning.

H8b Consumer Mobile Internet experience has a significant and positive relationship with a traveller's actual use of location-based social media for travel planning.

2.3 Online reviews and location-based social media adoption for travel planning

One important aspect of location-based social media is the ability to provide reviews on the attractions that travellers intend to visit. In today's Internet environment, consumers can easily contribute their thoughts and opinions on products and services thorough reviews and ratings. Google and Baidu are examples of companies offering location-based social media which allow users to contribute their thoughts and opinions on products and services, usually on attractions such as restaurants, museums, theme parks and other tourist destinations.
Given that these reviews are given by people whom the travellers may or may not know, there is a need to understand how users are influenced by the review information on location-based social media.

Previous literature has presented various theories such as Dual Process Theory and the Yale Model to explain how users are influenced by the reviews provided by social media (Cheung et al., 2009; Paphathanasis and Knolle, 2011). The Elaboration Likelihood Model (ELM) is commonly used to explain “how people are influenced in adopting ideas, knowledge or information” (Cheung et al., 2008). The ELM posits that “both information processing routes - central and peripheral, that people use to process information that are persuasive, depending on their ability and motivation” (Cheung et al., 2008). The central route is based on careful examination of the information, while the peripheral route is based on environmental cues surrounding the message which help in deciding whether the message should be accepted or not. The ELM was adopted by Sussman and Siegal (2003) and developed into a model of information adoption which has been applied in the context of computer-mediated communication. The information adoption model considers argument quality as the central influence and source credibility as the peripheral influence (Cheung et al., 2008). Argument quality is the persuasive strength of the argument in the reviews while source credibility is the credibility of the reviews (Cheung et al., 2008). The present study extends the UTAUT2 by integrating the information adoption model.

2.3.1 Argument Quality

In a social media environment, consumers’ decisions to purchase or use a product or service based on online reviews is determined by the perceived quality of the information received (Cheung et al., 2008). Therefore a traveller’s perception of the quality of the reviews and ratings will influence his or her behavioural intention and actual use of location-based social media. For this study, argument quality is measured by argument strength, review rating, and timeliness of the reviews.

Argument strength is defined as the extent to which the traveller views a review’s argument as convincing or valid in supporting its position (Cheung et al., 2009). If the reviews are perceived to have valid arguments, the traveller will in turn develop a positive attitude towards the information and will treat it as credible. On the other hand, invalid arguments from the reviews will lead to a negative attitude toward the reviews, and the travellers may be less inclined to use the information in travel planning. Cheung et al. (2009), in their study on online forum discussions, have supported the positive relationship between argument strength and the credibility of online consumer recommendations. The following hypothesis is therefore formulated:

H9 The higher the argument strength, the more likely users will adopt the information provided by the reviews from location-based social media.

Review rating is the overall rating by other users of the location-based social media on the reviews. Most location-based social media or social media applications allow users to evaluate and rate the reviews written by other users. Studies by Price et al. (2009) and Cheung et al. (2009) have found that review ratings can influence the perceptions of the information received from the reviews. Thus, high ratings on a review will indicate that other users agree and believe in the content of the review, while a low rating indicates the opposite. This research therefore hypothesizes that:

H10 The higher the review rating, the more likely users will adopt the information provided by the reviews from location-based social media.
The timeliness of the reviews refers to whether the reviews are up to date. Given that many products and services change rapidly, it would be risky for travellers to plan their travel based on outdated reviews. Delone and Mclean (1992), in their model for assessing systems quality, stated that information quality is determined by the timeliness of the information. Liu et al. (2008) also found that online reviews’ helpfulness can be predicted by their timeliness. Therefore this research proposes that:

H1 The higher the timeliness of a review, the more likely users will adopt the information provided by the reviews from location-based social media.

2.3.2 Source Credibility

Credibility in this study is defined as the extent to which the user perceives the review from location-based social media as believable. Extending the definition of Cheung et al. (2009), in this research credibility refers to trusting the person contributing to the review as well as trusting the online review itself.

Given that people are allowed to contribute to online reviews while remaining anonymous, it is important that reviews are perceived as credible before the information is adopted. Unlike traditional media, the Internet does not have government or ethical regulations controlling its content (Eastin, 2011). Together with the fact that new information is constantly being added at a rapid pace, this presents a new problem for users who are searching for information, as credible sources are increasingly becoming more difficult to differentiate from less credible sources (Eastin, 2011). One way that users may perceive the person contributing to the review as being credible is by examining the expertise of the contributor as well as his or her trustworthiness (Wiener and Mowen, 1986). Expertise and trustworthiness are both two of the most widely cited variables in assessing credibility of sources in the study of various fields such as marketing, advertising and recreation behaviour management (Patzer, 1983).

Consistent with previous studies, we believe that in the context of location-based social media, reviews will be viewed as more credible if they are posted by other consumers who have a high level of expertise and trustworthiness. The following hypotheses are therefore developed:

H12 The higher the contributor’s expertise, the more likely users will adopt the information provided by the reviews from location-based social media.

H13 The higher the contributor trustworthiness, the more likely users are to adopt the information provided by the reviews from location based social media.

Besides evaluating whether the person contributing the reviews is credible, it is also important to examine whether the reviews themselves are credible. There are factors that may influence how the reviews are perceived by the users – the review’s consistency, and the review’s sidedness. The review’s consistency is defined as how consistent the review is with other contributors’ evaluation of the product or service evaluation (Cheung et al., 2007; Cheung et al., 2009). Given that everyone is allowed to contribute to online reviews, there is a risk that some reviews are strongly biased, either in a positive or negative way. A user is likely to view a particular review as being credible if it is consistent with the opinions of other users. Besides being consistent, users will also feel that a review is credible if reviews are two sided (Cheung et al., 2009). In a two-sided review, both positive and negative comments are present, and for the reader, two-sided comments will tend to be viewed as more credible as they can reduce the receiver’s scepticism. Such a view is supported by the attribution theory in marketing research (Lang et al., 1997). However, it is also common in websites such as Taobao whereby sellers offer buyers incentives to change negative comments into positive comments. Nevertheless, in the case of Taobao, it is not known whether sellers who have received only positive comments will experience improved sales (Wang, 2012). Based on the discussion above, the following hypotheses are proposed:
H14 The more consistent the reviews are, the more likely users will adopt the information provided by the reviews from location-based social media.

H15 The more two-sided the reviews, the more likely users will adopt the information provided by the reviews from location-based social media.

We believe that if users find the review information to be useful, they are more likely to adopt and use location-based social media for their travel planning. Cheung and Tadani (2012) in their comprehensive review of electronic word of mouth impact, proposed that electronic word of mouth adoption will lead to consumers’ purchase intention. In this research, we proposed that travellers who adopt the review information will also be more likely to use location-based social media for their travel planning:

H16 Review information adoption has a significant and positive relationship with a traveller's intention to use location-based social media for travel planning.

Figure 1 presents the research model for this study.

3 METHODOLOGY

3.1 Data collection and sampling

In order to test our model, a survey questionnaire was developed. The survey was first translated into Chinese by a language instructor, and was later pre-tested by two university professors and 10 users of location-based social media. The surveys were distributed at various mobile phone shops located in shopping malls in Zhejiang Province, China. A total of 200 surveys were collected. The survey respondents included 103 males and 97 females, and the average age of the respondents was 27.
3.2 Measurement

All UTAUT2 predictors (i.e., performance, expectancy, effort expectancy, social influence, facilitating conditions, habit, hedonic motivation, price value, and behavioural intention) and information adoption model predictors (i.e. argument strength, review rating, timeliness, contributor expertise, contributor trustworthiness, review consistency, and review sidedness) were measured using a 7 point Likert scale (where 1 was “strongly disagree” and 7 was “strongly agree”). All indicators in this research were adapted from prior studies. Mobile Internet experience was measured using the number of months the users had experience in using mobile Internet. Actual use of location-based social media was measured using usage frequency of location-based social media activities.

4 RESULTS

This research used data analysis procedures similar to those used by Venkatesh et al. (2011). Partial least squares (PLS) regression using SmartPLS was applied to analyse the data. The measurement model was first examined for reliability and validity before testing the structural model. Table 1 presents the measurement model results. Both internal construct reliability and composite reliability are greater than 0.70, thus confirming the constructs’ reliability. The square roots of the average variance (in bold in Table 2) are all more than the absolute value of inter-construct correlations, thus supporting convergent and discriminant validity. The loadings for each of the constructs were greater than .90 and all cross-loadings were lower than 0.60 (details not shown due to space constraints), thus again supporting validity.

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Notes: AS : Argument strength; BI : Behavioural intention; ME : Mobile Internet experience; EE : Effort expectancy; FC : Facilitating conditions; HM : Hedonic motivation; HT : Habit; RA : Review information Adoption; PE : Performance expectancy; PV : Price value; RC : Review consistency; RE : Reviewer expertise; RR : Review rating; RS : Review sidedness; RT : Reviewer trustworthiness; SI : Social influence; TT : Timeliness; Use : Actual use; CR : Composite reliability; ICR : Internal Consistency Reliability

Table 1. Measurement model estimation
Table 2 presents the results from the structural model. From the table, the results show that all main variables from UTAUT2 have a positive and significant relationship with behavioural intention to adopt location-based social media for travel planning. The two newly-added relationships to behavioural intention to adopt location-based social media for travel planning: mobile Internet experience and information adoption, are both found to have no significant relationship. The variance in behavioural intention explained by the model is quite good at 64 percent.

The structural model also examined the antecedents of the adoption of information provided by reviews. The results showed that argument strength, review rating, review trustworthiness, reviewer expertise, and review sidedness all have significant and positive relationships with review information adoption. Neither timeliness nor review consistency have any significant relationship with review information adoption. The variance in review information adoption as explained by the model is 42 percent.

Similar to UTAUT2, this research also examined the factors affecting the actual use of location-based social media for travel planning. Our results showed that review information adoption, facilitating conditions, mobile Internet experience and behavioural intention will lead to actual use of location-based social media for travel planning. The results showed that although mobile Internet experience and review information adoption do not affect users’ behavioural intention, they do influence the actual use of location-based social media. An interesting finding showed that although habit has a significant relationship with actual use of the system, the relationship is negative rather than positive as hypothesized in this research. The variance in location-based social media use as explained by the model is 48 percent.

### 5 DISCUSSION

This research examined the factors that influence the adoption and actual use of location-based social media for travel planning by using a modified UTAUT2 as a base model (excluding the interaction effects of age, gender and experience while establishing a direct effect of mobile Internet experience), and integrating the information adoption model which centred its theoretical background on argument strength and source credibility. Although the UTAUT2 was developed to study consumer use of technology, this research modified and extended the model given that location-based social media adoption and use are also influenced by the review contents. Our results confirm that the main variables of the
UTAUT2 are able to explain the adoption and actual use of consumer technology in the context of location-based social media for the use of travel planning. Location-based social media is currently a growing technology which has a great impact on the travel industry. When e-commerce first became widespread, the travel industry’s (e.g. airline, hotels, travel agencies) competitive structure and business models were affected, requiring many companies to adapt to using the technology. Thus it is important for businesses to understand how the growing technology of location-based social media can influence their market and their competition, and a starting point is to understand what will influence consumers to adopt and use the technology.

A closer examination of the findings shows that the variables and relationships from UTAUT2, which is set in the context of consumer use of technology (i.e. hedonic motivation, facilitating conditions, habit, perceived value), is more important than the original UTAUT variables (i.e. perceived value, performance expectancy, social influence, and effort expectancy) (Venkatesh et al., 2012).

Our findings also show that the reviews on location-based social media play an important role in determining whether they will be used for travel planning. The interesting point to note is that review information adoption does not affect behavioural intention, but it affects actual use of the application. This shows that in the context of location-based social media, users who take serious views of the reviews information are those who use the system for travel planning. On the other hand, those who are only intending to adopt the system for travel planning may not be too concerned about the review information, and will pay attention to other factors related to hedonic motivation and facilitating conditions.

This research shows that when considering whether or not to adopt the information from reviews on location-based social media, users will look into the strength of the argument, expertise of the reviewers, ratings on the reviews, review sidedness and reviewer trustworthiness. Such findings are consistent with the results of Cheung et al. (2008), Cheung et al. (2009), and reviews by Chan and Ngai (2011).

We also found that location-based social media in travel planning are more likely to be used by those who have experience in mobile Internet, and facilitating conditions will also lead to the actual use of the system. It is interesting to note that habit is shown to have a negative relationship with location-based social media for travel planning. This seems to suggest that those who have regularly used the system to the extent that it has become a habit are not going to use the system for actual travel planning. One possible explanation could be that those who have made using the system a habit are finding that the system may not be yielding results that meet their expectations. However, further research should examine this finding. In general, the results support the findings by Venkatesh et al. (2012), although our findings should be interpreted with care due to the omission of the interaction effects of age, gender and experience.

6 CONCLUSION AND IMPLICATIONS

This research has several important implications. This research contributes to the extant literatures on location-based social media and technology adoption in several ways. Firstly, this study has contributed to existing technology adoption studies by modifying and extending the UTAUT2. The UTAUT2 is a relatively new model developed to understand the adoption of technology in the context of consumer usage. We took the UTAUT2 as a base model and integrated it with the information adoption model to understand location-based social media adoption. With social media and mobile commerce playing a critical role in our daily lives and business, it is important to understand what will influence consumers’ actual adoption of the technology. Location-based social media have characteristics that are different from many previous technologies. In the past, researchers such as Cheung et al. (2009) and Ayeh et al.
(2012) have examined the adoption of online reviews, while Chong et al. (2013) and Wei et al. (2009) examined the adoption of mobile commerce. Location-based social media combine the two technologies in such a way that on one hand, users need to look at the technology characteristics, while on the other hand, they are also influenced by the review information. As such, by proposing and examining the model suggested in this research, we are able to gain more insights into why users will adopt location-based social media, and in this research, we have studied the technology in the context of travel planning. We believe that our work will serve as a basis for future researchers to leverage the context in modifying and extending the UTAUT2.

Secondly, our research has examined the adoption of location-based social media in the Chinese market. Researchers have been concerned with the lack of adequate models that can be used to explain and understand the adoption of mobile technologies in the Chinese market (Chong et al., 2012). China is one of the largest and fastest growing markets for mobile technologies. There have been few studies which have focused on Chinese consumers, and understanding Chinese users’ adoption of location-based social media will contribute to the marketing discipline and provide future directions for related research set in the Chinese market context. Our study also showed that the findings are in general consistent with results from the UTAUT2. Theoretically, this shows that the UTAUT2 is applicable to different countries, although more studies should be conducted given the modification of our model and the exclusion of interaction effects.

Thirdly, mobile commerce and social media are currently at a crucial implementation stage in China (Chong, 2012). Although many firms and the Chinese government have invested a large amount of effort and finance in the mobile commerce market, its development and implementation growth are still very slow. This research therefore aims to provide a scientific, empirical study to understand the factors that will influence consumers’ location-based social media adoption decisions. Our findings can provide practitioners with guidelines and strategies that will ensure higher success rates in location-based social media implementation. For example, from the government’s point of view, in order to improve tourism through the use of location-based social media, facilitating conditions are extremely important. Various countries such as Singapore have provide free mobile Internet and hotspots to tourists, and without such infrastructure, it would be difficult for users to adopt location-based social media. In China, for example, where there is a free Wi-Fi connection, the initial login website is often written in Chinese which makes it difficult for tourists who do not speak Chinese to use. Other factors to be considered include examining the contents of the reviews, given that these will influence actual use of location-based social media for travel planning. It should be noted that the reviews’ sidedness is one of the most significant factors influencing review information adoption. In the case of Taobao, China’s largest e-commerce website, it is well known that sellers will often offer cash in return for customers changing their negative comments to positive comments. Therefore such practises may in fact reduce the credibility of the reviews in the long run, and affect the adoption of the reviews.

References


