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# POST ADOPTION BEHAVIOUR OF E-SERVICE USERS: AN EMPIRICAL STUDY ON CHINESE ONLINE TRAVEL SERVICE USERS

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## Abstract

*Post adoption behaviours of e-service users are important for e-service providers to increase both their revenues and profits. This paper develops a model to investigate the factors influencing users' post adoption behaviours, including continuance intention to use e-services and recommendation behaviour. The model is developed based on Expectation Confirmation Theory and includes two additional variables in it, namely perceived ease of use and recommendations. Based on 543 useful questionnaires, the model is empirically tested together with a number of hypotheses. The results show that both satisfaction and perceived usefulness positively impact users' continuance intention. Continuance intention, together with perceived usefulness, has positive influences on users' recommendations of e-service. Both theoretical and practical implications are discussed as well.*

*Keywords: Post adoption, Continuance Intention, WOM, Recommendation, ECT.*

# 1 Introduction

With the penetration of Internet into people's life, both traditional and online firms are offering electronic services (e-services) to customers either for achieving competitive priorities or owning competitive necessity. E-services are getting pervasive in the electronic market (Chea & Luo 2008; Khalifa & Liu 2003), and it has received the attention of IS researchers.

In information systems (IS) domain, prior research on post adoption behaviours suggested that post adoption behaviours are vital to the survival and success of a firm in the competitive marketplace, and mainly focused on two post adoption behaviours, namely, continuance intention and continuance usage. But prior literature in both IS and marketing fields suggest that other behavioural outcomes, such as Word of Mouth (WOM) or recommendations, are also critical, especially in the highly competitive online environment (Kim & Son 2009; Chea & Luo 2006). First, Internet makes recommendations generated by e-service users to spread to others via online media, such as blogs, social networking and forums (Reichheld et al. 2000). Second, prior research indicated that recommendations have significant effect on consumer purchasing behaviour, and are suggested to be an efficient marketing means in the online environment, which can increase both the revenues and profits of e-service providers (Mangold et al. 1999). Consumers would like to rely on recommendations to reduce the perceived risks and uncertainties associated with their service purchasing decision, and the influence of personal information source on service purchaser was stronger than products purchaser (Mangold 1999; Murray 1991). Thus, recommendations can help e-service providers to attract potential customer to use e-service. From the standpoint of e-service providers, it is of value to understand both recommendation behaviour and continuance intention in dealing with e-service users. Thus, this study is attempting to explore the determinants of the two post adoption behaviours, namely, continuance intention and recommendations.

Moreover, prior research indicated that user satisfaction and perceived usefulness were the motivators of IS users' continuance intention to use IS in the post adoption stage. This study is also trying to find whether the two factors are also the determinant of recommendation behaviour of e-service user in the post adoption stage. In addition, IS users' another perception, perceived ease of use are investigated in the current study as well.

Regarding above-mentioned research purposes, the current study integrates perceived ease of use and recommendations into the Expectation Confirmation Theory (ECT) and built a post-adoption model of e-services. In particular, the study seeks to investigate the influence of both cognition and satisfaction on the post-adoption behaviour of e-service users. Empirical data was collected via survey questionnaire and assessed using structural equation modeling technology. In essence, the proposed model offers a theoretical account of how user satisfaction and cognitions influence IS users' post adoption behaviour, including continuance intention and recommendation behaviour. The findings of the current study are expected to shed light on how user satisfaction and cognitions influence continuance intention and recommendation behaviour in the post adoption stage differentially in the context of B2C e-services.

The remainder of this paper is organized as follows. The next section presents the theoretical background and the research model. Subsequently, the research methodology is described with a discussion on the measurement, the sample, the validity and the reliability of the current research instrument, and the results of the study. Then, the research results are discussed. Thereafter, the theoretical and the managerial implications are presented. Finally, the limitations of this study and the implications for future research are discussed as well.

## **2 Theoretical Background and Research Model**

### **2.1 Post adoption behaviour of online users**

Recently, post adoption behaviours have received more attentions in the IS research. Prior literature in IS suggested that users' IS continuance is the main behavioural outcome in the post adoption stage, including continuance intention and continuance usage of IS (Bhattacharjee 2001; Bhattacharjee et al. 2008; Hong et al. 2008). The literature in IS domain also argued that there are some other post adoption outcomes, such as WOM or recommendations, complaint, and willingness to pay (Chea & Luo 2008; Kim & Son 2009). Though these behaviours are posited to be critical in the post adoption stage, especially in the online environment, they have not received the attention of research in the IS domain.

IS continuance is defined as users' decisions to continue using a particular IS over a long run, which describes users' behavioural patterns reflecting their continuance usage of a particular IS (Bhattacharjee 2001; Bhattacharjee et al. 2008). IS continuance refers to a form of post adoption behaviour. In the literature the term post adoption is often used as a synonym for IS continuance (Karahanna et al. 1999; Rogers 1995), and prior IS continuance research often designated IS continuance intention or IS continuance usage as the dependent variable in research (Bhattacharjee, 2001; Gefen et al. 2003; Bhattacharjee et al. 2008; Hong et al. 2008). In the online environment, online users may continue or discontinue to use e-services driven by the perceived benefits between IS application and their own needs. In addition, online users may recommend the e-services to others or would like to purchase the e-services online if their needs have been met, vice versa, they may discontinue use the e-services and switch to other alternative online services, and complain about the e-services. Obviously, recommendations, complaints and willingness to pay are also different post adoption behaviours of IS users together with IS continuance. Prior research on post adoption behaviour focuses on IS continuance and the other post adoption behaviours have received minimal attention.

### **2.2 Expectation Confirmation Theory**

Following the tradition of IS adoption research, such as Technology Acceptance Model (TAM), post adoption research in IS domain often emphasized users' cognitions as the determinants of their post adoption behaviours (Jasperson et al. 2005). Recently, Expectation Confirmation Theory (ECT) enjoys its reputation in a new stream of IS research to explore the post adoption behaviours of IS users, and research in the new stream shows that IS users' post adoption behaviour are mainly driven by the perceived benefits between the IS adoption and the needs of IS users, and user satisfaction was asserted to be the salient predictor of post adoption behaviour of IS users together with perceived usefulness.

ECT has been originally employed as a research framework in consumer behaviour literature to investigate both consumer satisfaction and their re-purchasing decisions (Oliver 1980). A vast body of research has empirically verified the predictive ability of ECT in explaining product repurchasing and service continuance in different contexts (Swam & Trawick 1981; Patterson et al. 1997; Oliver 1993; Dabolkar et al. 2000; Tse & Wilton 1988). It was first introduced to IS context by Bhattacharjee (2001), and he proposed an IS continuance model based on ECT (See Figure 1). He integrated perceived usefulness into the original ECT model together with user satisfaction to explain IS users' continuance intentions to use IS. In the proposed IS continuance mode, user satisfaction with prior IS use and their perceived usefulness of IS have positive influence on their continuance intentions to use IS. User satisfaction is determined by their perceived usefulness of IS and their confirmation of expectations from their prior IS use. In addition, IS users' confirmation of expectations has positive influence on their perceived usefulness of IS.

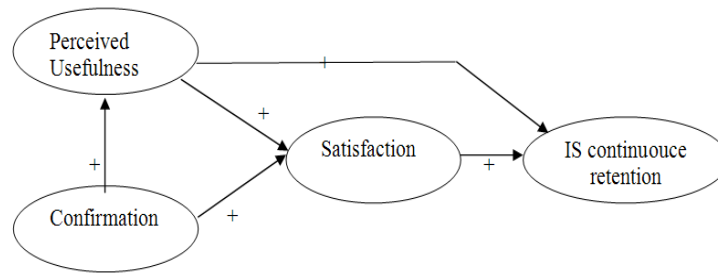


Figure 1 ECT based IS continuance model

The IS continuance model suggested by Bhattacherjee (2001) provides an excellent starting point for further exploration of the post adoption behaviour of e-service users since it explained IS continuance with a growing empirical base in the IS literature (Bhattacherjee 2004; Liao et al. 2009; Limayem et al. 2007; Limayem & Cheung 2008). Thus, the following hypotheses from the ECT are suggested in the current study:

*H1: User satisfaction with e-services is positively related to their continuance intentions to use e-services.*

*H2: Users' perceived usefulness of e-services is positively related to their continuance intentions to use e-services.*

*H3: Users' perceived usefulness of e-services is positively related to their satisfaction with e-services.*

*H4: Users' confirmation of expectations is positively related to their satisfaction with e-services.*

*H5: Users' confirmation of expectations is positively related to their perceptions of usefulness of e-services.*

### 2.3 Incorporating perceived ease of use into the IS continuance model

Prior research on IS adoption and IS continuance based on TAM have indicated that perceived ease of use is a consistent predictor of IS users' intentions to use and continue using IS (Davis et al. 1989; Gefen et al. 2003; Tong et al. 2006; Venkatesh & Davis, 2000). It has both direct and indirect influence on IS users' intention to use or continue using IS via perceived usefulness. As Thong et al. (2006) argued that features of IS will also have effects on users' continuance intention to use IS. In the ECT based IS continuance model, only perceived usefulness was assumed to have impact on IS users' continuance intention. In prior research on IS adoption, perceived ease of use was assumed to be closely related with the complexity of IS usage (Moore & Benbasat 1991). Thus, in the current study perceived ease of use was incorporated into the proposed research model attempting to examine the role of IS feature in explaining IS continuance. In this study, perceived ease of use is expected to have direct impact on IS user satisfaction and both direct and indirect effects on IS users' continuance intention to use IS via perceived usefulness in the e-service context. Similar to the reasoning applied to the association between confirmation and perceived usefulness developed in the ECT based IS continuance model proposed by Bhattacherjee (2001), users' confirmation of expectations on IS use is also expected to positively influence their perceptions on the ease of use of IS. When IS users gain confirmation experience, their perceptions on the ease of use will be adjusted and become more concrete. Thus, the following hypotheses are suggested:

*H6: Users' perceived ease of use in e-service is positively related to their continuance intentions to use e-services.*

*H7: Users' perceived ease of use in e-service is positively related to their satisfaction with e-services.*

*H8: Users' perceived ease of use in e-service is positively related to their perceptions of usefulness of e-services.*

*H9: Users' confirmation of expectations is positively related to their perceptions of ease of use in e-services.*

## 2.4 Incorporating Recommendations into the IS continuance model

As aforementioned that recommendations refers to a form of post adoption behaviour of users. Few prior studies have explored the motivating factors of recommendation behaviour of online users. Chea and Luo (2008) conducted a study on the post adoption behaviour of e-services and found that satisfaction is a predictor of recommendations of e-service users. In the study of Kim and Son (2009) in the context of e-services, user satisfaction was found to be a direct predictor of recommendations. Following East et al. (2007), user satisfaction is not the mere motivator of recommendations, there are some other stimuli motivating recommendations. Casalo et al. (2008) explored the role of satisfaction in developing customer loyalty and positive WOM in e-banking services and found that user satisfaction and loyalty are the two determinants of positive word of mouth. Continuance intention to use an IS is always regarded as a dimension of loyalty in IS domain. When IS users have the continuance intention to use e-services, they perceived that they have obtained great value in their e-service encounter. They are motivated to use e-services again and may promote the e-services to others by WOM behaviour. Thus, continuance intention is suggested to be a motivator of recommendations in the current study. According to Mangold et al. (1999), consumers normally recommend the most useful options to other consumers, and perceived value and quality are the two service attributes that stimulate recommendations. In the IS domain, perceived ease of use and perceived usefulness are perceived to be the two salient service attributes and have been regarded as important antecedents of both the perceived value and service quality of IS. Thus, in the current study, perceived ease of use and perceived usefulness are expected to have influence on e-service users' recommendations. Thus, the following hypotheses are suggested:

*H10: Users' perceived ease of use in e-service is positively related to their recommendations of e-services.*

*H11: Users' perceived usefulness of e-service is positively related to their recommendations of e-services.*

*H12: User satisfaction with e-service is positively related to their recommendations of e-services.*

*H13: Users' continuance intention to use e-services is positively related to their recommendations of e-services.*

Figure 2 presents the research model in the current study.

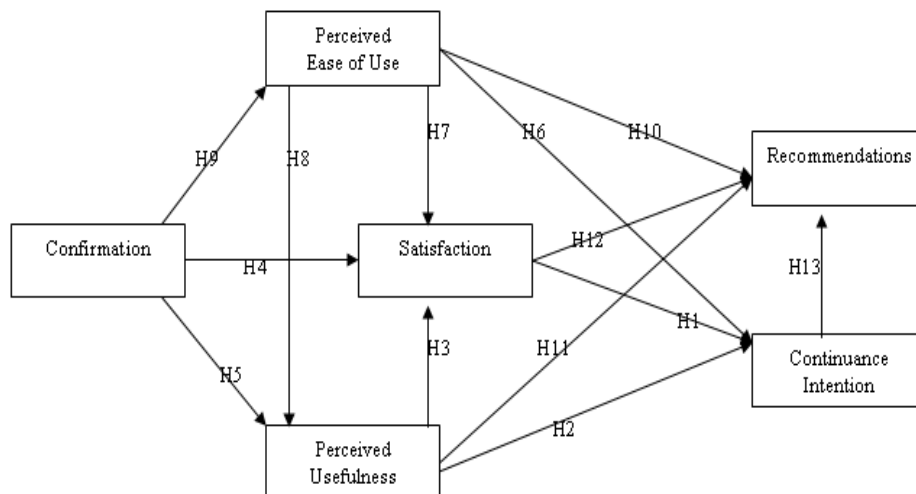


Figure 2 The research model

### 3 Research Methodology

#### 3.1 Measurements and sample

The research model includes six constructs. Each construct was measured with multiple items mainly adapted from existing literature and some modification and rewording have been conducted in order to meet the requirement of the specific research context. A survey was conducted in China to collect empirical data for the current research. The sample of this study was the customers of a online travel company in China. The customers were asked to indicate their motivating factors for continuance intentions to use online travel services and recommendations of the online travel services to others based on their previous experience of using online travel services. In this study a five-point Likert-scale ranging from strongly disagree (1) to strongly agree (5) was used to measure each item in the developed instrument.

The questionnaire was delivered to the randomly selected customers of the online travel service company by mail. Totally 1500 questionnaires were mailed to potential respondents, and 593 of them response to the survey completely. Among the 593 respondents, only 543 of them are used as the sample base of the current study and 50 of them have been deleted because they indicated that they had no usage experience of online travel services. Of the respondents, 61.9% were male and 38.1% were female. With respect to their usage frequency of online travel services, 42.7% of users have used online travel services once to five times, 57.3% six to ten times. Most of them (84.9%) had used Internet for more than three years. The majority (90%) of the respondents are among the age groups between 18 to 45 years old and 61.9% of them are male. Table 1 presents the demographic information profile of the respondents in this research.

Demographic profile	Category	Frequency	Percentage (%)
Gender	Male	336	61.9
	Female	207	38.1
	Total	543	100.0
Age	18-25	172	31.6
	26-35	165	30.4
	36-45	152	28.0
	46-55	34	6.3
	56-65	20	3.7
	Total	543	100.0
Education	College student	104	19.2
	Bachelor's level	287	52.9
	Master's level	114	21.0
	Ph.D level	38	7.0
	Total	543	100.0
Duration of using Internet	More than 2 years	82	15.1
	More than 3 years	461	84.9
	Total	543	100.0
Online travel service booking experience	1-5 times	232	42.7
	More than 5 times	311	57.3
	Total	543	100.0

Table 1 Demographic profile of respondents

### 3.2 Validity and reliability

The data analysis was performed using Smart Partial Least Squares (PLS) to obtain estimates for the measurement and structural parameters in our structural equation model (Chin et al. 2003). The measurement model was first tested with the algorithm in PLS in order to examine the validity and reliability.

Convergent validity can be assessed by inspecting the factor loadings of the measures on their respective constructs (Chin 1998; Hulland 1999; Tenenhaus et al. 2005), and the reliability of the measures can be assessed using composite reliability (CR), Cronbach's alpha and average variance extracted (AVE). The test results showed that almost all of the factor loadings are satisfactory with the cut-off value above 0.7, except five of them are acceptable with the cut-off value between 0.5 and 0.7 (Hair et al. 2006). The Cronbach's alpha values range from 0.700 to 0.819, and all of them are over the 0.7 level. The values of composite reliability (CR) and the average extracted variance (AVE) satisfy the cut-off value 0.7 and 0.5 respectively (See Table 2), which indicates good internal consistency and reliability in this study (Fornell & Larcker 1981). In addition, the square root of AVE of all constructs are greater than the correlation estimate with the other constructs, which indicates that each construct in the research model is more closely related to its own measures than to those of other constructs. Thus, discriminant validity is supported in this study (See Table 3) (Fornell & Larcker 1981).

Construct	Items	CR	AVE	Cronbach's alpha	Factor Loading	St. Error	t-value
Perceived Ease of Use	PEOU1	0.834	0.562	0.732	0.815	0.023	35.262
	PEOU2				0.839	0.017	49.329
	PEOU3				0.574	0.039	14.538
	PEOU4				0.741	0.052	14.116
Perceived Usefulness	PU1	0.805	0.512	0.700	0.773	0.024	31.929
	PU2				0.780	0.027	28.572
	PU3				0.728	0.027	26.144
	PU4				0.557	0.052	10.670
Confirmation	CON1	0.833	0.628	0.729	0.656	0.065	10.094
	CON2				0.895	0.024	37.349
	CON3				0.809	0.040	19.813
Satisfaction	SAT1	0.827	0.614	0.701	0.760	0.029	25.959
	SAT2				0.810	0.020	39.341
	SAT3				0.780	0.023	33.933
Continuance Intention	CI1	0.892	0.734	0.819	0.877	0.011	78.417
	CI2				0.858	0.018	47.408
	CI3				0.835	0.018	45.989
Recommendations	REC1	0.814	0.531	0.747	0.830	0.018	45.205
	REC2				0.863	0.016	51.302
	REC3				0.586	0.059	9.848
	REC4				0.587	0.063	9.309

Table 2 The Measurement Model

	PEOU	PU	CON	SAT	CI	REC
PEOU	<b>0.749</b>					
PU	0.505	<b>0.715</b>				
CON	0.158	0.137	<b>0.792</b>			
SAT	0.450	0.429	0.320	<b>0.783</b>		
CI	0.354	0.419	0.105	0.507	<b>0.856</b>	
REC	0.277	0.410	0.156	0.370	0.610	<b>0.728</b>

Table 3 Correlation Matrix and Discriminant Assessment



### 3.3 Structural model test and hypothesis testing

In the current study a bootstrapping procedure was employed to test the effects and the statistical significance of the parameters in the structural model. Figure 3 gives a graphical description of the research results in the current study including path coefficients and variances explained. The test result of structure model shows that all the hypotheses are significant, except for H6 (PE to CI), H10 (PE to REC) and H12 (SAT to REC). Recommendations are found to be influenced by IS continuance intention ( $\beta=0.52, p<0.001$ ) and perceived usefulness ( $\beta=0.25, p<0.001$ ). IS continuance intention are positively associated with perceived usefulness ( $\beta=0.38, p<0.001$ ) and satisfaction ( $\beta=0.22, p<0.001$ ). User satisfaction is found to be positively related with perceived ease of use ( $\beta=0.28, p<0.001$ ), perceived usefulness ( $\beta=0.19, p<0.001$ ) and confirmation ( $\beta=0.24, p<0.001$ ). Perceived ease of use is found to be a strong predictor of the perceived usefulness ( $\beta=0.50, p<0.001$ ), and confirmation has significant effects on perceived ease of use ( $\beta=0.16, p<0.001$ ) and perceived usefulness ( $\beta=0.06, p<0.05$ ).

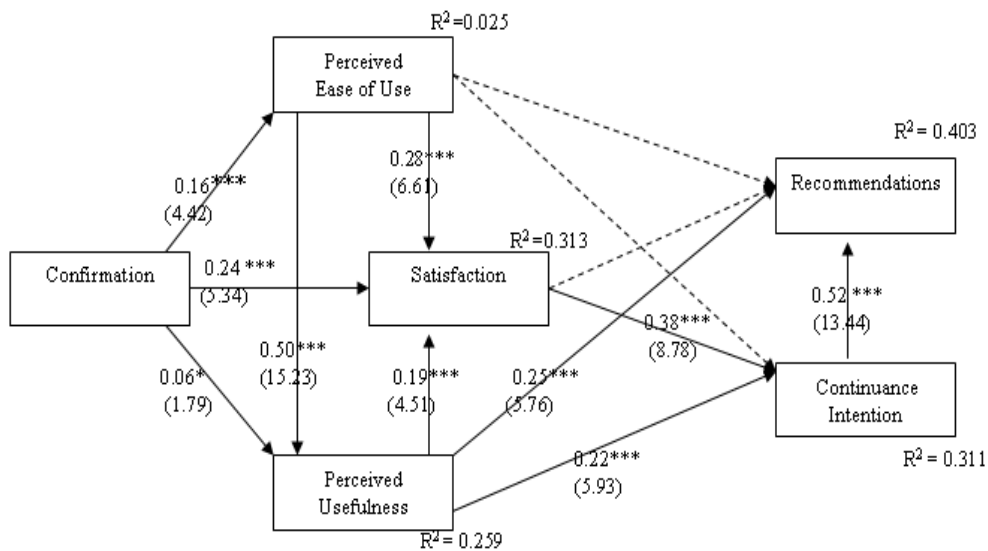


Figure 3 Structural analysis of the research model

The proposed intention model explains 31.1% of IS continuance intention and 40.3% of recommendations. Perceived ease of use, perceived usefulness, confirmation and perceived service quality account for 31.3% of satisfaction, and perceived ease of use interprets 25.9% of perceived usefulness. In addition, confirmation interprets only 2.5 % of perceived ease of use.

## 4 Discussion

The purpose of this study was to examine the determinants of users' continuance intention and recommendations behaviour with respect to online travel services. The current study employed ECT as background by incorporating perceived ease of use as a direct antecedent of post adoption behaviour and designating recommendations as a parallel dependent variable in the research model with continuance intention. The study results show that the factors motivating online travel service users' continuance intention and recommendations behaviour in the post adoption stage are different.

The study results specify two motivators of e-service users' continuance intention, which are perceived usefulness and satisfaction. User satisfaction was found to be the most important determinant of continuance intention ( $\beta=0.38$ ), while perceived usefulness ( $\beta=0.22$ ) was reducing its saliency in predicting users' intention in the post adoption stage compared to its strong saliency in

motivating IS adoption. The finding in the current research supports the contention in ECT that having satisfied users is the critical motivator of IS continuance intention. In practice, user satisfaction is based on IS users' first-hand e-service experience, which is much more realistic, unbiased, and less susceptible to change compared to their cognitive beliefs on online travel service usage, such as perceived usefulness of e-service. IS users' perception of the usefulness of e-services changes before and after their use of e-services. Thus, IS users would like to make their decisions on continuing or discontinuing using e-services relying more on accurate information and their satisfaction based on their experience rather than on their cognitive beliefs on IS usage, such as perceived usefulness.

The results also indicate that continuance intention and perceived usefulness are the two determinants of users' recommendations behaviour. Of the two factors, continuance intention was found to be the stronger factor influencing e-service users' recommendations behaviour ( $\beta=0.52$ ). Perceived usefulness ( $\beta=0.25$ ) influences recommendations behaviour of e-service users directly and indirectly via continuance intention. In other words, e-service users' recommendations behaviour is mainly motivated by e-service users' positive perception of the usefulness of e-services and their intentions to continue using the e-services. Though user satisfaction has been postulated to be a salient motivator for users' recommendations behaviour in prior literature (Chea & Luo 2008; Kim & Son 2009; East et al. 2007), unexpectedly, it was not found to be a predictor of users' recommendation in this study. User satisfaction was found to have indirect impact on recommendations behaviour via continuance intention. The study result is in contrast to the results of prior studies. We intend to explain this finding as follows: prior research suggested user satisfaction to be the salient determinant of recommendations behaviour; however, user satisfaction is based on the dissonance between the expected or desired services and the actual services e-service users have encountered. Different users may have different level of satisfaction because of their different expectations before their actual usage of e-services. Thus, user satisfaction can promote the post adoption behaviours of e-service users, which is only related to their own behaviour, such as continuance intention; for the post adoption behaviour influencing other, user satisfaction will not have direct influence on it, such as recommendations.

Consistent with previous studies of post adoption behaviour of IS users, IS users' perception of ease of use has no significant effect on both continuance intention and recommendations behaviour in the current study. However, the study results show that perceived ease of use, perceived usefulness and confirmation are the determinants of user satisfaction. Compared to the effects of perceived usefulness ( $\beta=0.19$ ) and confirmation ( $\beta=0.24$ ), perceived ease of use has a larger influence ( $\beta=0.28$ ) on user satisfaction. The effect of perceived ease of use on user satisfaction has been found in previous research (Roca et al. 2006; Thong et al. 2006). As expected, IS users' perception of ease of use in e-service has strong influence on their perception of the usefulness of e-service. It implies that the feature of IS, such as how easy it is to use an IS, is an important factor influencing IS user satisfaction and their perception on the usefulness of IS, and its influence can be even stronger than the perceived usefulness and the confirmation of their expectations. In other words, to make a website to be easy to use for users is more important than the utilitarian of the website and how the website can meet the needs of the users in satisfying e-service users.

In this study, confirmation was found to have significant effects on perceived usefulness, perceived ease of use and satisfaction. Though confirmation has significant effects on perceived ease of use, it only explained 2.1% of perceived ease of use. Thus, it can be concluded that confirmation is not the major factor in predicting users' beliefs (perceived ease of use, perceived usefulness) on IS usage.

## **5 Theoretical and managerial implications**

### **5.1 Theoretical implications**

The current study made several contributions to the IS literature. Based on the findings on the post adoption behaviour of IS users in the current study, the paper presents the different impact of both

perceived usefulness and user satisfaction on the post adoption behaviours of IS users, including continuance intention and recommendation behaviour. The current study also found that IS continuance intention has significant influence on their recommendation behaviour in the post adoption stage for the first time, at least in e-service context.

Traditional TAM factor, perceived usefulness was found to be the salient motivator of e-service users' post adoption behaviour, including recommendation behaviour and continuance intention. In particular, perceived usefulness predicts e-service users' recommendation behaviour directly and indirectly via continuance intention. It implies that utilitarian is an important factor motivating e-service users' post adoption behaviour.

Moreover, user satisfaction, as an affect, was found to be a strong determinant of e-service users' continuance intention together with perceived usefulness. It can be concluded that both IS users' affect and cognition are important motivators for their IS continuance intention. It is consistent with the prior finding of Chea and Luo (2008) that users' affect and cognition both have impact on their post adoption behaviour in IS usage, and they are interplayed. According to Chea and Luo (2008), in the online environment, competitors are capable of emulating the service attributes and feature technologically, and creating an emotive connection is a less replicable differentiation strategy, which creates long-term trust among customers and healthy customer relationships.

Finally, it can be concluded that users' continuance intention to use e-services and cognition on the utilitarian of e-services are the factors motivating e-service users' recommendation behaviour, while affective cognition doesn't have effect on the post adoption behaviour of recommendation. It also implies that the post adoption behaviours of IS users are associated.

## **5.2 Managerial implications**

Due to the importance of retaining e-service users and the strong effect that recommendations exerts on e-service users' choices, e-service providers should try to not only retain their existing users, but only motivate their existing users to promote their e-services via positive WOM about their services (Chung & Darke 2006). In this respect, the current research offers several alternatives to retain existing e-service users and to develop positive WOM in the context of online travel services.

Firstly, travel service providers that operate through the Internet should try to maximize user satisfaction with their previous e-service experience through their websites. User satisfaction can improve online travel service users' continuance intention to use online travel service directly and influence online travel service users' recommendation behaviour indirectly via continuance intention. According to the results of the current study, user satisfaction can be generated if the expectations of online travel service users are met. Therefore, online travel service providers should try to meet the needs of their online customers. It will help to offer online users what they want in an efficient way and improve their satisfaction, which can motivate online users to continue using the online travel service directly and also push them to promote the online travel service to others through positive recommendations indirectly. As a consequence, the retention-rate of the online travel service will be increased, which will also result in the recommendations behaviour of online travel service users indirectly. It can help online travel service providers to market their service business in the electronic marketplaces.

Secondly, online travel service providers should try to improve the utilitarian of their websites in order to improve users' perceptions on the usefulness of online travel services. As the study results indicated that perceived usefulness, as an intrinsic motivation of online travel service users, can help online travel service providers to improve the satisfaction, continuance intention and recommendation behaviour of online travel service user.

Third, online travel service providers should try to manage their websites and make it easy to use. Indeed, the most effective websites should be the most easy to use. In other words, online travel

service providers should prioritize the ease-of-use in their website development. Indeed, greater perceived usability can help to satisfy online users' needs and, as an indirect consequence, increase their intention to continue using online travel services and the likelihood for them to promote the online travel services to fellow customers via their positive word of mouth. It suggests that in order to improve user satisfaction with IS, IS service providers should try to improve their e-service system function and offer positive experience to IS users.

## 6 Limitations and implications for future research

This study has offered some new insight into post adoption behaviour in the individual level, a number of limitations still need to be acknowledged. First, the empirical study was conducted only in China. It is recommended to replicate the study using a wider sample of customers. The sample should represent a greater diversity of nationalities. Hence, it will be possible to investigate possible differences in the post adoption behaviour of users from different nationalities in the context of online travel services. Second, the current study tests how users' cognition and satisfaction influence users' post adoption behaviour, other aspects of IS users, such as perceived reputation, trust, social presence, mood, emotion, have not been considered. Thus, there is scope for further work on investigation on the post adoption behaviour from more different aspects of IS users. Finally, the study tests users' post adoption behaviour in the context of online travel services, the research results should not be generalized to other sectors. Thus, there is scope for future research to test the research model in different online contexts in order to improve its generalizability.

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