

PERCEIVED ENJOYMENT AND MALAYSIAN CONSUMERS' INTENTION TO USE A SINGLE PLATFORM E-PAYMENT

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ABSTRACT

This study explores the perceived enjoyment of Malaysian consumers' in adopting a single platform e-payment system and the relationship between perceived ease of use, perceived usefulness and perceived enjoyment with consumers' intention to use a single platform that integrates card, internet and mobile. The online survey was conducted on respondents owning either mobile phone, card payment, or internet. Based on analysis using AMOS version 21.0, the results showed that perceived ease of use can be used as mediator of perceived enjoyment. Perceived ease of use was also found to be significant in determining perceived usefulness and consumers' intention to use the system. This finding also suggests that as consumers perceive the single platform e-payment system as highly enjoyable, easy to use and useful; they would be more ready to use three-payment system. The results of this study bear social implications on the purchasing behavior of Malaysian consumers and how businesses conduct transactions in the future using novel, single platform e-payment system.

Key Words: Enjoyment, Consumers' Intention, Single Platform e-payment, Card, Internet, Mobile

INTRODUCTION

Consumers are attracted to e-payment technologies due to the ease of use, user friendliness, and in some instances cost savings (Kalakota and Whinston, 1996; Burdett, 1999; Schwartz, 2001, Sumanjeet, 2009). Hultman (2005) notes that the consumers are evaluating the overall quality of services offered throughout their entire experience. There has been increase of researchers study enjoyment lead to consumers' intention to use Internet services (Moon and Kim, 2001; Van der Heijden, 2003) and mobile services (Verkasalo, 2008; Phan and Diam, 2011). The encounter thus presents an opportunity to show the organization's potential as a quality service provider, and to enhance consumers' intention to use. This study focuses on the consumers-based research orientation such as consumers' intention to use that is measureable with the adoption of Technology Acceptance Model (TAM) (Davis, Bogozzi and Warshaw, 1989) to enhance the efficiency of identifying the potential of deploying an integrated e-payment single platform system with perceived enjoyment. Therefore, this study seeks to explore the perceived enjoyment of Malaysian consumers' in adopting a single platform e-payment system. Further, this study also investigate the relationship between perceived ease of use, perceived usefulness and perceived enjoyment with consumers' intention to use one single e-payment platform that integrates Card, Internet and Mobile as a novel system.

LITERATURE REVIEW

Technology Acceptance Model (TAM) was introduced by Fred Davis in 1986 and specifically tailored for modeling users' acceptance of information systems or technologies or new product acceptance. The goal of Davis (1989) TAM is to explain the general determinants of technology acceptance that lead to explaining users' behaviour across a broad range of end-user computing technologies and user populations. The belief of the person towards a system might be influenced by other factors referred to as external variables in TAM. In this study will based on Technology Acceptance Model that was formed by Venkatesh and Davis (1996) after the main finding of both perceived usefulness and perceived ease of use were found to have a direct influence on behaviour intention, thus eliminating the need for the attitude construct. The two significant beliefs exist in the TAM are the perceived usefulness and perceived ease of use. TAM also postulates that perceived ease of use stimuli perceived usefulness because the easier to use single platform e-payment system, the more useful users perceive the single platform e-payment system to be. There are empirical studies of the TAM include this correlation and the finding share a significant relationship between these two factors (Moon and Kim, 2001; Van der Heijden, 2003; Shih, 2004).

With the emergence of technology, additional variables are introduced to the TAM so to produce an extended TAM for predicting consumers' intention to use. These variables include product involvement (Koufaris, 2002), cost (Shih, 2004) and perceived enjoyment (Sun and Zhan, 2006). The factor of perceived enjoyment is added in TAM according to Liao, Tsou, and Shu, (2008) and Cheema, Rizwan, Jalal, Durrani, Sohail (2013) studies on online shopping adoption and found that perceived enjoyment has direct relationship with intention to use. Perceived Enjoyment in this study is defined as enjoyable and exploratory as a subjective psychological experience that is the context of information technology and computer-mediated environments (Webster, Trevino, Ryan, 1993). Venkatesh (2000) expressed perceived enjoyment as the extent to which the activity of using a particular system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use. The enjoyment on adoption intentions to use Single platform e-payment system is manifested through consumers' existing experience of using cards, Internet and Mobile that can be done on a single platform. Information System researchers start to acknowledge that how enjoyable an information system may be is as important as how usable and useful it is (Blythe, Hassenzahl, Wright, 2004). Therefore, enjoyment becomes a vital construct for this study in determining consumers' intention to use the novelty of single platform e-payment system.

Based on TAM as the underlining theory, Figure 1 demonstrates the variables used in this study to determine consumers' intention to use the single platform e-payment system. For the purpose of the study, the following hypotheses were posited:

- H1: Perceived enjoyment has relationship on perceived usefulness.
- H2: Perceived enjoyment has relationship on perceived ease of use.
- H3: Perceived enjoyment is associated with consumers' intention to use
- H4: Perceived usefulness is positively associated with consumers' intention to use
- H5: Perceived ease of use has positive relationship on perceived usefulness.
- H6: Perceived ease of use is positively associated with consumers' intention to use.

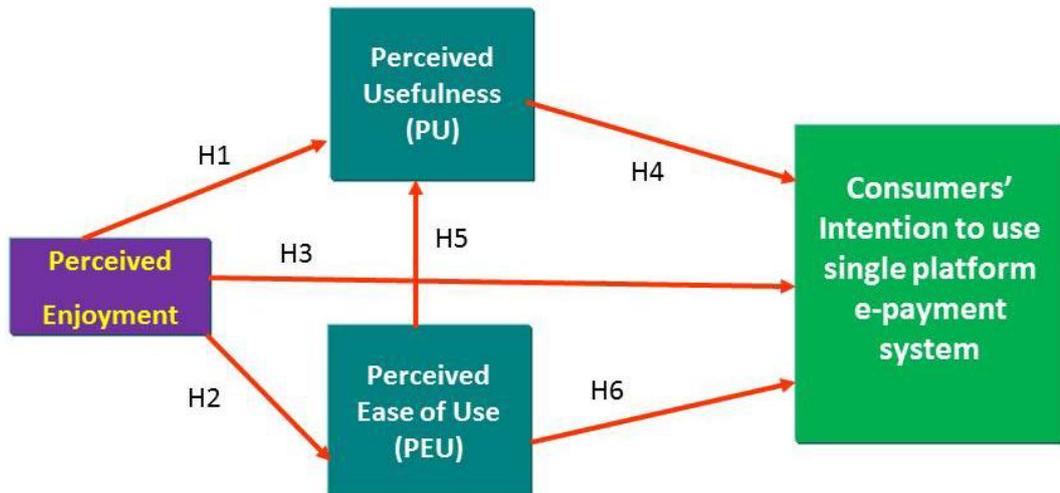


Figure 1: Theoretical Framework

METHODOLOGY

Given the Malaysia population is 28.3 million (Malaysian Census Report, 2010), the population in this study includes only respondents who have made payment either mobile phone or card or internet for last 12 months. Data collection was done via online survey questionnaire. Based on non-probability sampling, 384 samples were required (Krejcie and Morgan, 1970) which was more than 200 samples recommended for models in SEM studies (Hair, Black, Babin, Anderson and Tatham, 2006; Klien, 2011). Data was collected from 389 respondents who fulfill the requirements and used in the analysis.

In this study, five-point scale Likert-type ('strongly disagree' to 'strongly agree') were used to measure the consumers' intention to use a single platform e-payment system. The five point scale was selected to encourage respondents to make positive or negative choices (Cooper, Schindler, and Sun 2008) in order to produce more emphatic information (Oppenheim, 1992). The Cronbach's alphas for the variables are as follows: consumers' intention to use (.90), perceived usefulness (.95), perceived ease of use (.95) and perceived enjoyment (.90).

RESULTS

Table 1 shows the respondents' demographic profiles of the survey. Majority or 45.2% were in the age range of 26-40 years old with 60.4% male respondents, single (51.7%) with at least college/university (69.9%) working at middle management level (42.2%). About 62.7% owned all three (3) items mobile phone, internet and card payment.

Table 1
Respondents' profile

Variable	Frequency (n=389)	Percent (Total 100%)
Gender		
Male	235	60.4
Female	154	39.6
Marital Status		
Single	201	51.7
Married	188	48.3
Age		
< 25	86	22.1
26-40	176	45.2
41-55	105	27.0
> 55	22	5.7
Education		
Secondary/High school	60	15.4
College/university	272	69.9
Graduate school	54	13.9
Other	3	0.8
Job position		
Top Management	27	6.9
Middle Management	164	42.2
Junior Management	45	11.6
Professional	12	3.1
Other	141	36.2
Owning		
1 item (Mobile/Internet/Card)	53	13.6
2 items(Mobile+Card/ Mobile+Internet/ Card+Internet)	92	23.7
3 items (Mobile, Internet & Card)	244	62.7

Measurement Model

All the goodness of fit indices were good and satisfied the requirements with the validity assessment of the CFA model. Chi-Square was 229.68 ($p=0.00$, $df=87$). Based on Tabachnick and Fidell (2007), the relative Chi-Square (χ^2/df) at 2.64 is below the 5.0 required for good fit. As stated by Hair et al. (2006), p -value is sensitive to the sample size and it may occur significant if using large sample size (Hair et al. 2006). In absolute fit indices, the goodness of fit index (GFI) was .93, higher than .90 (Hair et al. 2010). Comparative fit index (CFI) was .97, above the .90 required for good fit (Hu and Bentler, 1999). Root mean square error of approximation (RMSEA) was .064, below the .08 required for good fit (Byrne 1998). For the overall measurement model, the results indicated good fit model.

Structural Model

Based on the results of measurement model, the structural model was examined with the theoretical links as shown in Figure 2 with all of the goodness of fit indices that indicated an acceptable model.

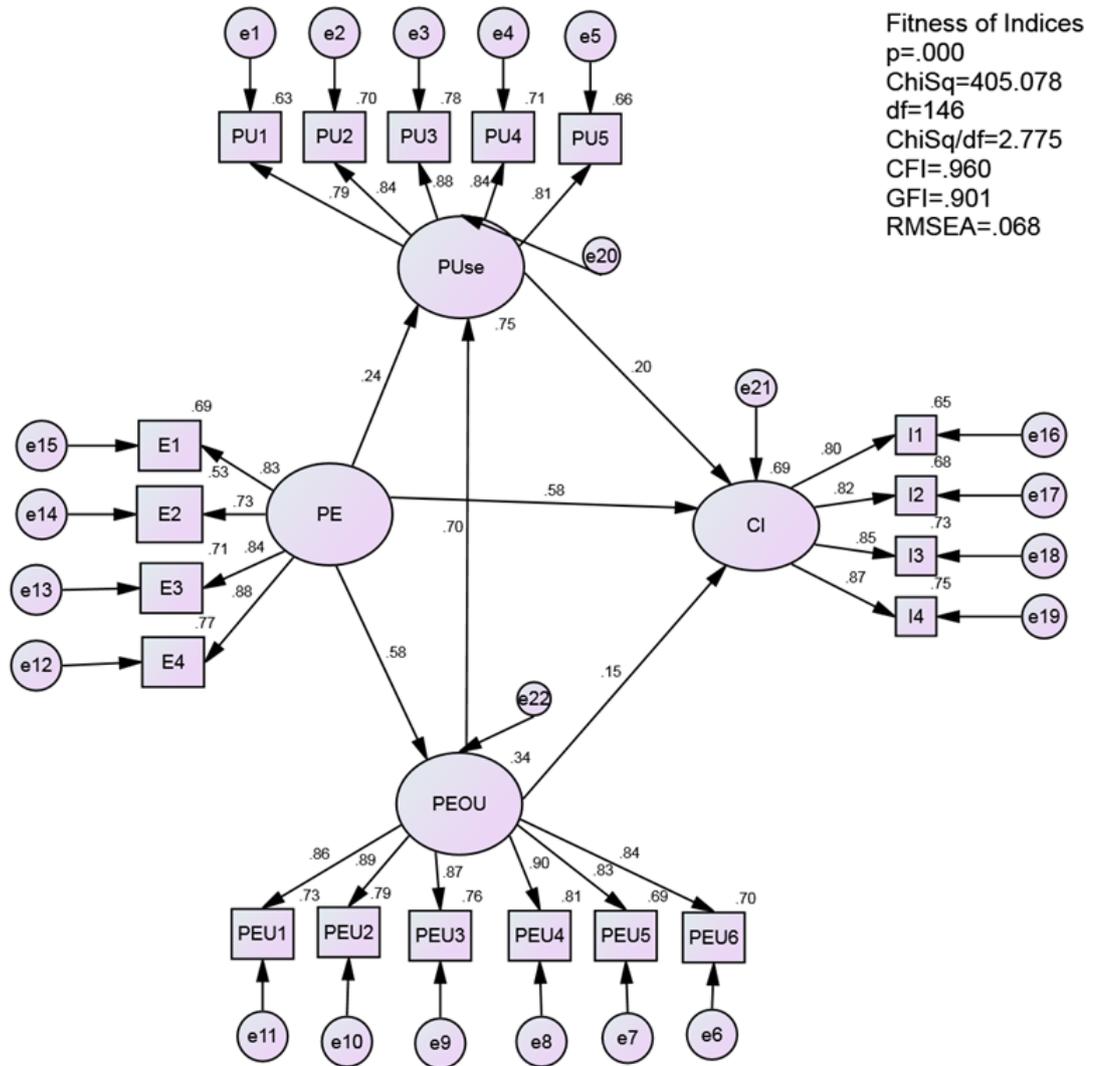


Figure 2: Structural Model

The overall structural model shows all paths of standardized regression weights as shown in Table 2 are statistically significant at the $p \leq 0.001$ and $p \leq 0.05$ level and that all the six hypotheses were supported.

Table 2
Standardized Regression Weights of Structural Model

Hypothesis	Standardized Regression Weights		S.E.	C.R.	P	Results	
Hypothesis 1	PU	<---	PE	.036	5.62	***	Sig. $p \leq 0.001$
Hypothesis 2	PEOU	<---	PE	.045	11.21	***	Sig. $p \leq 0.001$
Hypothesis 3	CI	<---	PE	.057	10.23	***	Sig. $p \leq 0.001$
Hypothesis 4	CI	<---	PU	.100	2.38	.02	Sig. $p \leq 0.05$
Hypothesis 5	PU	<---	PEOU	.052	13.07	***	Sig. $p \leq 0.001$
Hypothesis 6	CI	<---	PEOU	.087	2.05	.04	Sig. $p \leq 0.05$

Note: PU Perceived Usefulness, PE Perceived Enjoyment, PEOU Perceived Ease of Use, CI Consumer Intention, Sig. - Significant

DISCUSSION AND CONCLUSION

This study included perceived enjoyment as an exogenous factor in the technology acceptance model (Davis, 1996). SEM analysis shown a significant positive relationship between perceived ease of use and perceived usefulness and it was the strongest predictor of usefulness with path coefficient=.70 (C.R=14.27, $p=0.00$) in Figure 2. Consistent with the previous studies, perceived usefulness is found to be predicted by perceived ease of use (Davis et al., 1989; Venkatesh and Davis 2000; Henderson and Divett, 2003; Wong and Teo, 2009). When consumers' perceived the single platform e-payment system is easy to use, their perception of the e-payment system is that it is useful too. Perceived enjoyment has a lower direct significant relationship with perceived usefulness (.24) than with perceived ease of use (.58). Thus, in this study perceived ease of use can be considered vital in determining perceived usefulness in complex system like the single platform e-payment system as suggested by Sun and Zhang (2006). Therefore, for complex systems like the single platform e-payment system, organizations planning to implement the system might look at perceived ease of use and may use it as the mediator to enhance perceived usefulness and consumers' intention to use.

The positive significant relationships between perceived enjoyment with perceived usefulness and perceived ease of use are supported by previous studies (Venkatesh et al., 2002; Yi and Hwang, 2003). Furthermore, the significant relationship for perceived enjoyment and consumers' intention to use the system are also supported (Agarwal and Karahanna; 2000; Van der Heijden, 2003; Shen, 2012; Cheema et al, 2013). Thus, perceived enjoyment could be mediated by both perceived usefulness and perceived ease of use as well as direct relationship on perceived consumers' intention to use the e-payment system. The results suggest that perceived usefulness contributes 20 per cent, perceived ease of use contributes 15 per cent and perceived enjoyment contributes 58 percent towards consumers' intention to use the system. Therefore, when consumers think that the single platform e-payment system is highly enjoyable, easy to use and useful; they will be more ready to use the system. These findings bear social implications on the purchasing behavior of Malaysian consumers and how businesses conduct transactions in the future using the novel, single platform e-payment system.

One limitation of using online survey is the limited target audiences with Internet access only. The data also represents only the Malaysian context and might not be relevant to other countries. The data was collected at one point of time and may change over time due to greater experience and advancement of E-payment technologies. Therefore, future study should be expanded to non-internet users using traditional survey method. This study can be replicated in other developed or developing countries as well as a longitudinal study to examine the single platform e-payment system and consumers' intention to use.

In conclusion, the empirical results from the study suggest that perceived ease of use is significant in determining perceived usefulness and consumers' intention to use the single platform e-payment system. Perceived ease of use can be used as mediator of perceived enjoyment. As consumers perceive the single platform e-payment system as highly enjoyable, easy to use and useful; they would be more ready to use the e-payment system.

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