

Factors That Influence Utilization of Internet Payment System In Malaysia From The Individual Users' Perspective

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ABSTRACT

The aims of this study are to identify factors that affect internet-payment system adoption by the Malaysian public, and to understand the effect of these factors on their behavior toward using the system. A self-administered questionnaire was utilised and responses from 308 individual users were collected and analysed using structural Equation Modeling (SEM) techniques. Findings showed that *perceived usefulness*, *ease of use* and *social influence* have an effect on the *behavioral intention* of users, which in turn, has an influence on the *actual use of* the system by the users. Moreover, it was also found that perceived risk has a mediating effect on the relationship between *trust* and *behavioral intention* to usage. Findings from this study contribute to the literature of user acceptance of Information systems and can assist service providers, such as Malaysian commercial banks and government agencies, in improving their online payment systems that are offered to the general public.

Keywords: Internet Payment System, user acceptance, technology adoption, technology management, web-based application

JEL Classification: M10, M15

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INTRODUCTION

Internet Payment System or “online payment” allows financial deals to be securely done by a single organization or individual over the Internet (Allen, 2003; Shon & Swatman, 1998). This allows the consumers, who go online to make buying decisions, order online and complete the payment processes online, to minimize theirs and their suppliers’ transactional efforts (Treiblmaier, Pinterits, & Floh, 2008).

The adoption of Internet technology by finance companies internationally has been rising because it enables them to sustain the advancement of business payment by acting as a medium for network leeway, client gaining, social obligation (finance to the unfinanced segment), funds transmission and remittances (Wonglimpiyarat, 2009).

The increased global use of Internet by the e-commerce industry is matched by the international acceptance of the Internet by their customers for doing payment transactions, as has been reported in a number of surveys. For example, a 2012 survey conducted by Nielsen showed that in the United States, 59% of those surveyed prefers online purchases than in-store and mobile purchases (Nielsen, 2012).

In Malaysia, the overall number of Internet banking subscribers increased in 2005 from 2.5 million subscribers (9% penetration to population) to 15.2 million subscribers (50% penetration to population) in 2013. This indicates a huge potential for the Internet Payment System, however, this trend does not seem to be at par with the active users in Malaysian Internet payment consumers since only 7.5 million or 50% out of 15 million are active users (BNM, 2014). In spite of the obvious benefits to be gained and the Malaysian government’s effort in promoting the use of the Internet and e-commerce to local businesses and general public, the lack of response by Malaysian consumers are “still far from maturity level” (Ecommerce-europe, 2012, p. 44)

With the population of almost 30 million (estimated in year 2014) in Malaysia and only 7.5 million (or 25%) are actively utilizing Internet payment, it is vital for the financial service providers to understand the present development of Internet payment applications (BNM, 2014). The study on buyer inclinations toward Internet payment implementation has not been comprehensively surveyed in the Malaysian background. This has incisive out the wants for an examination. Hence, an exhaustive investigation of the issues on the acceptance of Internet payment in Malaysia is essential not only to financial service managers, but also to the government policy-makers.

This study have identified many researches in Internet payment area of research that have successfully generated information on rate of on-line payment adoption and levels of adopter [e.g. Sidek (2015); Lee, Loke and Tan (2013); Harris, Guru and Avvari (2011)]. Nevertheless, the question of what influences the acceptance itself has remained unanswered. This situation is clearer in the case of Internet application studies in Malaysia, where only a few studies have focused on the factors that influence the adoption of online payment system, especially from the perspective of Malaysian general public.

Thus, this study attempts to fulfil this gap. Its aims are to identify factors affecting Internet Payment System adoption by the Malaysian retail (individual) users, and to understand the effect of these factors on their behavior in adopting the system.

REVIEW OF LITERATURE

To achieve its objectives, this study examined influential factors on technology adoption that have been proposed by current literature, focusing on those that affect acceptance of internet-based systems provided by government agencies to the general public and concentrating on adoption at individual level of usage. It reviewed several technology acceptance models including Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), The Innovation Diffusion Theory (IDT) and Model of Trust (MOT). From these models, this study selected several variables to be included into its research framework (Figure 1), especially those suggested by UTAUT (Venkatesh, Morris, Davis, & Davis, 2003).

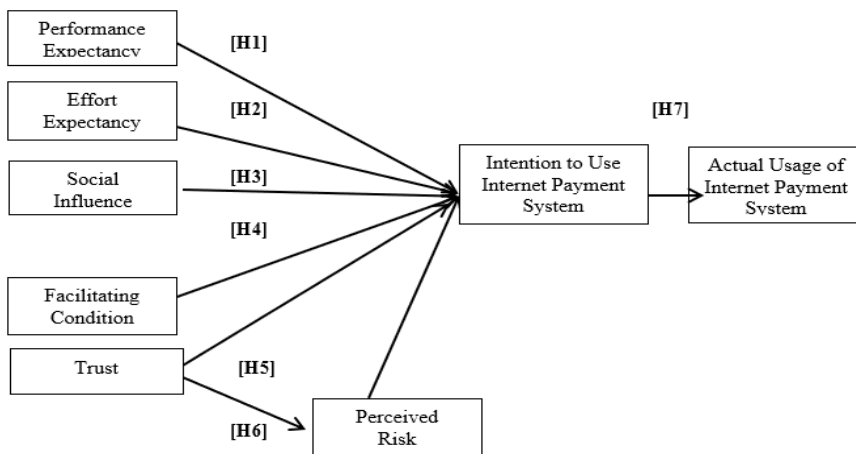


Figure 1: The research framework for this study

From UTAUT, this study determined six variables that are relevant to its research context and incorporated them into its research framework; four are ascertained as independent variables (performance expectancy, effort expectancy, social influence and facilitating condition), one as mediating variable (intention to use Internet Payment System) and one as a dependent variable (Actual usage of Internet Payment System). Similarly, from the MOT, two variables were chosen; one as an independent variable (trust) and the other, as the mediating variable (Perceived Risk). The selected variables and their relationships to other variables are explained as follow.

Performance Expectancy (PE)

Performance expectancy is outlined as the level to which a user thinks that using the system will support him or her to reach benefits in task performance (Venkatesh et. al., 2003). Some literature acknowledge this variable's similarity to usefulness, extrinsic motivation, relative advantage, outcome expectations and job-fit (Davis F. , 1989; Thompson, Higgins, & Howell, 1994; Moore & Benbasat, 1991; Compeau & Higgins, 1995; Venkatesh, Thong, & Xu, 2012). Previous literature have found that perceived usefulness is one of the vital usage aspects for online payment application (Pikkarainen, Pikkarainen, Karjaluoto, & Pahnla, 2004). In regard to this study's context, it postulates that users' performance expectancy is directly

related to their intention to use the Internet Payment System which users believe the Internet payment to be more strategic when contrasted to the conventional way of operating payment transactions. Furthermore, Internet Payment System has allowed users to make modernized transactions, which some custom-made service transactions can be accomplished within a click of a computer mouse, and the requirement to duplicate procedure filling has diminished. Thus, the relationship between performance expectancy and intention to use Internet Payment System can be posited that for the system to be used by customers, it is perceived to be useful to the extent that they expect that by using the system, their performance will be enhanced. Therefore, this study suggests that:

H1: The higher the users' expectation in increased job performance in using Internet Payment System, the more likely they are to have the intention to utilize the system.

Effort Expectancy (EE)

Like performance expectancy, effort expectancy of use is also derived from UTAUT, which is originated from the study by Venkatesh et. al. (2003). Effort expectancy is described as the level of ease related to the use of the system (Venkatesh et. al., 2003). This variable has also been indorsed as an important determinant in adoption of information technologies, such as intranet (Chang, 2004), WWW (Lederer, Maupin, Sena, & Zhuang, 2000), online banking (Wang, Wang, Lin, & Tang, 2003) and wireless internet (Lu, Yu, & Yao, 2003; Shih & Fang, 2004). In the context of this study, effort expectancy has a direct relationship with intention to use, which less effort to operate the system will lead to an increase intention to use it. Internet Payment System users expect the system to be sophisticated but with less effort to use, less complex task to pay online and it could be done in a user-friendly manner. This requirement can be shown by its ease of use. If the payment process takes a lot of time and is complicated, it will demotivate the users and they will refrain from using other online activities as well. Therefore, this study believes that:

H2: The higher the users' expectation in the ease of use in using Internet Payment System, the more likely they are to have the intention to utilize the system.

Social Influence (SI)

Social influence is defined as the level to which a person perceives that others believe he or she should use a new application (Venkatesh, Morris, Davis, & Davis, 2003). In the context of consumer usage, social influence is the extent to which consumers perceive that vital others such as family members and friends believe they should use a certain technology (Venkatesh, Thong, & Xu, 2012). Many past studies, like Riquel & Rios (2010), propose that outward and social influence has an influence on the use of new technology because of their involvement to adoption behavior. Social Norms have been proven to be significant factor in studies such as eBidding utilization (Zulkifli, Said, Kwong and Chong, 2015), e-mail usage (Karahanna & Limayem, 2000), wireless finance adoption (Kleijnen, Wetzels, & de Ruyter, 2004) and Internet banking usage (Chan & Lu, 2004). Most studies on mobile banking have found a significant association between social influence and intention to adopt (Yu C. S., 2012). In the context of

this study, it is believed that social status of users who adopt Internet Payment System facilities are affected by the the positive or negative views of the system by family, acquaintances or peers. Therefore, it proposes that:

H3: The higher the users' expectation in increased pressure by family, acquaintances or peers in using Internet Payment System, the more likely they are to have the intention to utilize the system.

Facilitating Condition (FC)

Facilitating condition is stated as the level to which a person believes that an organizational and technical infrastructure occurs to reinforce the use of the system (Venkatesh, Morris, Davis, & Davis, 2003). In the consumer perspective, facilitating condition denotes to consumers' insights of the resources and assistance accessible to them to achieve an adoption behavior (Venkatesh, Thong, & Xu, 2012). Information on past literature have found different environments of facilitating conditions affect the behavioral and the use of Internet payment. The study by Jaruwachirathanakul and Fink (2005) in Thailand for example, states that the adoption of the Internet payment is influenced by the user-friendliness to Internet as a fundamental requirement by consumers. Another study by Suganthi (2001) has found that reliable service conditions of Internet payment service provider's web site, regardless of business hours, is essential so that consumers can execute their payment transactions at their own suitability. A study by Ramly, Said, Chong and Rahman (2015) on E-syariah usage by Malaysian Shar'ie lawyers also concludes a similar positive relation between the presence of supporting technical facilities and the intention to use by the users. In the context of this study, facilitating condition means consumers' expectation on the internal idea of person capacity, and the external resource and support circumstances, such as computer and training, will influence the Internet Payment System usage. Therefore, it suggests that:

H4: The higher the users' expectation in increased organizational and technical infrastructure supporting usage of Internet Payment System, the more likely they are to have the intention to utilize the system.

Trust (TR)

Trust is defined as the "willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer, Davis, & Schoorman, 1995, p. 712). The pivotal relations can be established between trust and behavioral intention to use. Moreover, beliefs, intentions, and behaviors that are appropriate and composed in a meaningful manner, as they are defined to be cohesive constructs, can lead to to or predict another. That is, trusting beliefs lead to intentions that, in turn, become visible in behaviors (McKnight, Choudhury, & Lacmer, 2002; Yousafzai, Pallister, & Foxall, 2005). In the context of this study, trust is suggested as a predictor to the intention to use. The relationship between these two variables is described whilst users' readiness to execute payment transactions on the Internet, assuming that the service provider will fulfill its duties, irrespective of the users'

capacity to monitor or control the provider's activities on the Internet. Furthermore, users' trust on the Internet is also related to the provider's perceived technical expertise and implementation, and in the setting of Internet payment, users' understanding of the fundamental characteristic and procedures that rule the provider's behavior is also truly essential. Therefore, this study proposes that:

H5: The greater the trust that users have in using the Internet Payment System, the more likely they are to have the intention to utilize the system.

Perceived Risk (PR)

Perceived risk has been stated as a combination of uncertainty plus the seriousness of results (Bauer, 1967). It is also defined as uncertainty about the potential negative consequences of consuming a product or service (Kaplan & Garrick, 1981). A study by Jarvenpaa, Tractinsky, & Vitale (2000) has found that trust is connected with lesser perceived risk of purchasing on the Internet, and it has discovered that trust is influenced by the users' perception of the size and reputation of the store which reduces perceived risk associated with buying from an Internet store which in turn increases consumers' willingness to purchase from Internet. Moreover, according to Yousafzai, Pallister, & Foxall (2009), perception of risk plays the mediating role of trust since earlier studies have stated that the "first and most necessary step" in founding users' security is to offer them with the assurance that their private information will be protected (Cheskin Research, 1999). The study by Ratnasingham (1998) suggests that while consumers grow low level perceptions of risk, the self-confidence in the association will also rise and will encourage open, practical, and persuasive information interchange. The degree of trust is depended on one party's readiness to relay on another party in certain conditions. In the setting of this study, Perceived risk is believed to have a major function in gaining users' confidence in using the Internet payment. Once Internet payment applications are capable of providing good answers to authorization, authentication, privacy, integrity, redress mechanisms and procedures for reviewing and amending erroneous transactions, only then will a lower level of perceived risk in the system succeed. Therefore, this study believes that:

H6: The greater the users' trust in using Internet Payment System, the more likely they have the intention to utilize the systems and this relationship is indirectly influenced by their expectation of lower risk in using the system.

System Intention to Use (IU) and System Actual Use (AU)

Behavioral intention is defined as "a person's subjective probability that he will perform some behavior" (Fishbein & Ajzen, 1975, p. 288). On the other hand, actual use or usage is "determined by what people would like to do (attitudes), what they think they should do (social norms), what they have usually done (habits), and by the expected consequences of their behavior" (Thompson, Higgins, & Howell, 1991, p. 216). The positive correlation between system intention to use and system actual use has been well established in the Information system research stream. Many studies have provided significant evidence that tendency to perform a specific behavior can be anticipated from its initial behavioral intention (Venkatesh,

Morris, Davis, & Davis, 2003; Venkatesh, Thong, & Xu, 2012). This study also accepts this same proposition and believes that users' intention to use Internet Payment System will be directly related to its actual use, which is based on their learning process about information and services by service provider of Internet payment within trial and error development. Therefore, this study proposes that:

H7: The higher the users' intention to use Internet Payment System, the more likely they are to actually utilize the system.

RESEARCH METHODOLOGY

In this study, self-administrated questionnaires were distributed and collected by using judgmental sampling method. Individuals (Malaysian citizen or non-citizen) who have access to the Internet and used the Internet Payment System while also having financial accounts are measures that were accepted in this research. In order to enhance the representation of the sample, customers from eight commercial banks (Affin bank, Alliance bank, AmBank, CIMB Bank, Hong Leong Bank Berhad, Maybank, Public Bank and RHB) that are located in Klang valley were chosen as respondents. A total of 308 usable questionnaires were gathered and utilized for analysis using Structural Equation Modeling (SEM).

The appropriate scale and measurement techniques on dependent, independent and mediating variables were adapted from those utilized in the previous literature (Refer to Table 1). The operationalization of PE was based on the five items adapted from Venkatesh et. al. (2012), while for EE, the seven items were adapted from Davis (1989), Pavlou (2003), Venkatesh et. al. (2012). In measuring SI, three items were adapted from Taylor and Todd (1995) and Venkatesh (2012). For FC, Five items were taken from Venkatesh et al (2003) and Venkatesh et. al. (2012), including the measurement on users' knowledge, helpdesk, best equipment and compatibility. For TR, Adapted from Gefen (2002), McKnight et al. (2002) and Yousafzai et. al. (2009), the measurements were related to the 'trust' on service (Internet payment), entity (Service provider), and medium of transaction (Internet) and they were categorized into seven items. Measures for PR were operationalized as three items from Sitkin and Weingart (1995), and Jarvenpaa et al. (2000). IU was measured using three items adapted from Venkatesh et al (2012) and for AU, six items adapted from Thompson, Higgins, & Howell, (1991), and Venkatesh et. al. (2003). All items were processed using a five-point Likert scale.

Table 1: Research Instrument and Measurement of Variables

No.	Variable	No. of items	Scale of Measurement	Source
1.	Performance Expectancy (PE)	5	Interval	Davis (1989) and Venkatesh <i>et. al.</i> (2003)
2.	Effort Expectancy (EE)	7	Interval	Davis (1989), Pavlou (2003), Venkatesh <i>et. al.</i> (2012)
3.	Social Influence (SI)	3	Interval	Taylor and Todd (1995) and Venkatesh <i>et. al.</i> (2012)

Table 1 (Cont.)

4.	Facilitating Condition (FC)	4	Interval	Venkatesh <i>et al</i> (2003) and Venkatesh <i>et. al.</i> (2012)
5.	Trust (TR)	7	Interval	Gefen (2002), McKnight <i>et al.</i> (2002) and Yousafzai, Pallister and Foxall (2009).
6.	Perceived Risk (PR)	3	Interval	Sitkin & Weingart (1995) and Jarvenpaa <i>et al.</i> (2000).
7.	Intention to Use (IU)	3	Interval	Venkatesh, Morris, Davis, & Davis, (2003) and Venkatesh <i>et. al.</i> (2012)
8.	Actual use (AU)	6	Interval	Thompson, Higgins, & Howell, (1991), Venkatesh, Morris, Davis, & Davis, (2003)

RESULTS

Reliability and Validity

Each constructs in the study was tested for validity using convergent and discriminant validity test. At this stage, confirmatory factor analysis (CFA), average variance extracted results (AVE), composite reliability test and Cronbach's alpha were performed. Average variance extracted results (AVE) results were established when the variance has extracted an estimate to measure an amount of variance gained by a coanstruct associated to the variance from the random measurement error. AVE value higher than 0.5 indicates the presence of convergent validity and AVE variance from 0 to 1 refers to the ratio of the total variance. Composite reliability was the overall reliability of the whole scale. Composite reliability value is recommended to be above 0.7 and AVE above 0.50 (Hair, Tatham, Anderson, & Black, 2006). From Table 2, all factor loadings for the study are significant and exceed the 0.5 guideline recommended by Hair et al. (2006). All constructs variance extracted estimates are also found to surpass the 50 percent. The composite realiability values are higher than 0.6 ranging from 0.755 to 0.877. To sum up, these construct are proven adequate in term of convergent realibility.

Table 2: Reliability and Validity

No	Construct	Factor Loading	Average Variance Extracted (AVE)	Composite Reliability	Cronbach's Alpha
1	Performance Expectancy		0.544	0.856	0.912
	PE1	0.676			
	PE2	0.702			
	PE3	0.743			
	PE4	0.811			
	PE5	0.75			

Table 2 (Cont.)

2	Effort Expectancy (EE)	0.505	0.877	0.946
	EE1	0.682		
	EE 2	0.715		
	EE3	0.731		
	EE4	0.725		
	EE5	0.71		
	EE6	0.736		
	EE7	0.628		
3	Social Influence (SI)	0.643	0.842	0.96
	SI1	0.815		
	SI2	0.9		
	SI3	0.674		
4	Facilitating Conditions (FC)	0.471	0.78	0.965
	FC1	0.708		
	FC2	0.698		
	FC3	0.731		
	FC4	0.601		
5	Trust (TR)	0.461	0.851	0.972
	TR1	0.629		
	TR2	0.493		
	TR3	0.42		
	TR4	0.749		
	TR5	0.809		
	TR6	0.741		
	TR7	0.803		
6	Perceived Risk (PR)	0.608	0.823	0.972
	PR1	0.812		
	PR2	0.823		
	PR3	0.699		
7	Intention to Use (IU)	0.622	0.831	0.978
	IU1	0.749		
	IU2	0.796		
	IU3	0.819		
8	Actual Use (AU)	0.362	0.763	0.807
	AU1	0.491		
	AU2	0.655		
	AU3	0.723		
	AU4	0.778		
	AU5	0.522		
	AU6	0.411		

Discriminant Validity

Discriminant validity is analyzed via correlation test of two (or more) independent variables that differentiates the objects in the group. Discriminant validity measures whether one variable is internally correlated, unique and distinct from other variables. In this study, discriminant validity was evaluated by average variance extracted for all constructs which must be less than 0.9 as recommended by Hair, Bush & Ortinau (2003). From the results in Table 3, constructs with value less than 0.8 indicate the presence of discriminant validity. There are no correlations which show the value of Pearson's Correlation greater than 0.8. The constructs in the study are considered acceptable based on recommendation set by Hair et. al. (2006). Therefore the analysis indicates the scales developed for the study have good discriminant validity.

Table 3: Discriminant Validity

Variables	AU	PE	EE	SI	FC	TR	PR	IU
AU (Use)	1							
PE (Performance)	.602*	1						
EE (Effort)	0.238**	0.735**	1					
SI (Social)	0.344**	0.483**	0.710**	1				
FC (Facility)	0.351*	0.512**	0.507**	0.465**	1			
TR (Trust)	0.225**	0.606**	0.607**	0.588**	0.705**	1		
PR (Risk)	0.436*	0.542**	0.535**	0.473**	0.556**	0.625**	1	
IU (Intention)	0.194**	0.777**	0.702**	0.501**	0.482**	0.554**	0.467**	1

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Revised Measurement Model

Confirmatory factor analysis (CFA) was used to improve the GOF indices of the model. After re-specification, the overall fit of the revised model was examined based on the output obtained as Figure 2. A summary of results is presented in Table 4. The test of fitness of the model used on the whole sample produces a χ^2 value of 580.817 while the CMIN/DF is reported to be 1.335. Referring to the χ^2 value, the model did not seem to be compatible. However, other indices were also used as indicators to determine the goodness of fit of this study's model. The TLI (0.967) and GFI (0.905) values are within desirable range, which suggest the model can fit the data. CFI and NFI show reasonable values which 0.972 and 0.900 (close to 1), which suggest that the model and the data are harmonious with one another, RMSE value is 0.033 within the desirable range for model's fit. In other words, the re-specification process has improved the model's fit.

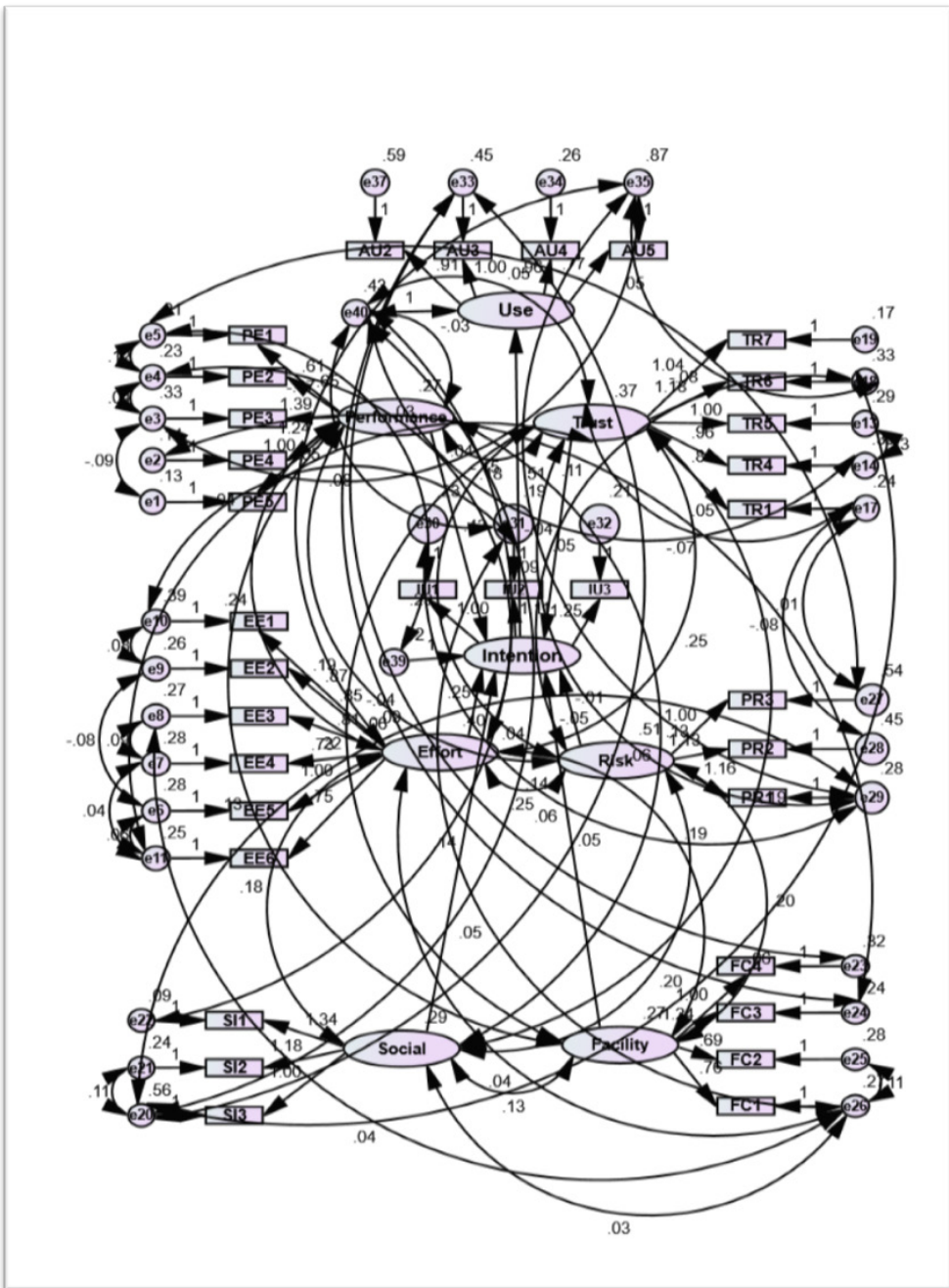


Figure 2: Revised Study Measurement Model

Table 4: Goodness-of-fit for revised study model

GOF Indices	Value
CMIN	580.817
CMIN/DF	1.335
GFI	.905
NFI	.900
CFI	.972
TLI	.967
RMSEA	.033

As the revised measurement model has shown a good fit, it was used to examine the proposed hypotheses in this research. The relationships between the variables and Internet Payment System adoption were analysed by examining the significance of the path coefficients in the model. The data were later analysed to determine its mediating effect. The results for the independent and mediating variables are shown in Tables 5 and 6.

Table 5: SEM output for hypothesis testing

Parameter	Estimate.	S.E.	C.R	P-value
PE → IU	.433	.086	5.048	***
EE → IU	.254	.081	3.130	.002
SI → IU	.145	.063	2.297	.022
FC → IU	.052	.083	.627	.531
TR → IU	-.038	.083	-.462	.644
IU → AU	.511	.102	5.028	***

Table 6: Test of Mediating Effects of Satisfaction on Perceived Risk → Intention Relationship.

Step	Estimate	SC	C.R/t	P-Value	Results
1. Intention ← Trust	.541	.146	3.694	0.000	Significant
2. Perceived Risk ← Trust	.549	.213	7.276	0.000	Significant
3. Intention ← Risk	.157	.065	2.410	0.016	Significant
Direct Effect				.146	
Indirect effect				.057	

The results show that performance expectancy (hypothesis H1, $\beta=0.433$, $C.R=5.048$, $p=0.000 < 0.05$), Effort Expectancy (hypothesis H2, $\beta=0.254$, $C.R=3.130$, $p=0.002 < 0.05$) and Social influence (hypothesis H3, $\beta=0.145$, $C.R=2.297$, $p=0.022 < 0.05$) have a significant positive influence on users' intention to utilize Internet Payment System in Malaysia.

On the other hand, findings indicate that the hypothesis H4 is not supported. Base on the coefficient ($\beta=0.052$, $C.R=0.083$, $p=0.531 > 0.05$), Facilitating Condition is proven to have an insignificant correlation with the behavioral intention toward using Internet Payment System. Similarly, results ($\beta=-0.038$, $C.R=-0.462$, $p=0.644 > 0.05$) do not support hypothesis H5. Thus, Trust is concluded to have an insignificant correlation with the intention to use Internet Payment System. Thus the null hypothesis was accepted at $\alpha=0.05$.

The results also indicate that Trust has a significant effect on Perceived risk based on the coefficient (with $\beta=.549$, $p < 0.05$). A strong relationship is also concluded between Perceived Risk and intention to use ($\beta=.157$, $p < 0.05$), with a direct effect determined to be 0.146 and an indirect effect as 0.057. Therefore, it is determined that perceived risk mediates the relationship between trust and intention to use Internet Payment System. These results also support hypothesis H6.

The findings also show a substantial relationship between Intention to use and Actual Use of Internet Payment System ($\beta=0.511$, $C.R=5.028$, $p=0.000 < 0.05$). In support of hypothesis H1, intention to use is found to have a significant and positive effect on actual system utilization. The implication of the results indicates that the greater the intention to use by Internet Payment users, the more tendency of willingness among them to actually use the system.

DISCUSSIONS

This study's findings show that performance expectancy, effort expectancy and social influence have a considerable influence on the intention to adopt Internet Payment System by Malaysian users, which in turn are proven to have a strong affect on the actual use of the system by Malaysian general public. Results also indicate that perceived risk has a mediating effect on the relation between trust and behavioral intention. These findings help to enrich the literature on user acceptance of web-based systems and to propose other implications for the effective adoption of other online systems.

From the theoretical perspective, this study has adopted three variables from the UTAUT model (performance expectancy, effort expectancy and facilitating condition and behavioral intention) and findings from the analysis show that there are substantial relationships between performance expectancy and effort expectancy to behavioral intention. These results concur with those of past research (Karahanna, Straub, & Chervany, 1999; Venkatesh, Morris, Davis, & Davis, 2003).

In regard to the practical implication, the results from the study find behavioral factors, such as performance expectancy, effort expectancy, and social influence affect the use of Internet Payment System. The implication of the results provide significant benefits for public and privat sectors stakeholder i.e Bank Negara Malaysia and Malaysian commercial banks. Thus, to improve service and acceptance of the system, the banks need to convince Malaysians that making payment online are faster, more convenient and easier-to-use, compared to making payments via physical offices or branches. There is a need for the banks and other service providers to increase efforts to improve Malaysian public awareness on the advantages of using Internet-payment system through advertisements and educational programs. Moreover, improving the rate of usage and acceptance should begin and be coordinated with those who have influence on Malaysian society, such as local social activists, celebrities and communities leaders.

The findings also have several policy implications. They indicate that the majority of individual retail bank consumers in Malaysia considered Internet Payment System as reliable and productive system. However there might be other online payment attributes such as

satisfaction, information quality, product specifiability and competitiveness which affect users' decision to accept or reject the system. These information can be used as an input in improving the system. In addition, the banks can also consider in making Internet Payment use as mandatory since its use is currently voluntary for all, and perhaps this will increase the rate of usage by users.

Moreover, the findings have implications at the national level. For example, this research benefits policy makers such as Bank Negara Malaysia, Ministry of Finance, Malaysia Communication and Multimedia Commission (MCMC) in inventing meaningful online payment law and processing policies in line with the banking as well as infrastructure transformation.

CONCLUSION

This study attempts to fulfill a gap in a Consumer-to-business online payment literature by examining factors that influence the use of Internet Payment System in Malaysia. Its research framework consists of five independent (performance expectancy, effort expectancy, social influence, facilitating condition and trust), two mediating (perceived risk and intention to use) and one dependent (actual usage) variables. Its results indicate performance expectancy, effort expectancy and social influence have an effect on the intention to use Internet Payment System by Malaysian public, which in turn, influence the actual adoption of the system. Mediating effect of perceived risk is also identified in the findings. These results support the findings of previous researches, and confirm the model as fit. The findings, not only enrich the current literature on technology acceptance, they also add value in understanding the behavior of users in adopting Internet Payment System in Malaysia. Moreover, in view of the increasing popularity of mobile device usage, additional research employing this framework on the adoption of Internet Payment System or other Internet applications, such as social media or cloud computing via smart phones or tablet computers would be desirable. Similar studies could serve to increase the external validity of this study's results.

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