Sharing Economy through E-Wallet: Understanding the Determinants of User Intention in Malaysia

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ABSTRACT

This study investigates the determinants of e-wallet user intention in Malaysia due to the emergence of sharing economy. A structured questionnaire was used to collect data from a total of 233 online payment users. The data collected was analysed using the PLS-SEM. Mobile ease of use, mobile perceived compatibility, mobile perceived trust and mobile user mobility are found shaping the e-wallet user intention. However, mobile usefulness and mobile perceived security risk are not the factors explaining the e-wallet user intention. The modification of mobile technology acceptance model provides the insights that user mobility can be one of the critical factors determining the e-wallet user intention. The present study contributes to the literature of mobile payment user behavioural intention by investigating the e-wallet user intention using a mobile technology acceptance model. This study also extends the knowledge of the model by introducing mobile user mobility factor to explain the e-wallet user intention.

Keywords: sharing economy; mobile technology acceptance model; mobile user mobility; user intention; e-wallet

INTRODUCTION

The United Nations' 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development aim to seek alternatives in utilizing resources efficiently and attain sustained economic growth (United Nation, 2020). Due to the repercussions of rising world population, government and public services are under pressures to utilize resources to promote a sustainable economy. Globally, the communities are inclined to use technology and digitalization as a means to disrupt the traditional way of conducting business to promote sustainable economic, social and environmental growth.

The sharing economy has gained global recognition over the years in promoting sustainable economic growth (Belk, 2014; Martin 2016). Through the help of digital and mobile technology, financial transactions activities and information can be easily shared with peers and merchants. The sharing economic activity, especially in financial payment through e-payment, digital payment and mobile payment complements the traditional style of payment using paper-based money, checks, debit cards and credit cards. The working of the sharing economy has great potential that enables an innovative pathway to sustainable business.

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The inclination toward mobile technology lay the key in supporting sharing economy activities. Mobile wallet or e-wallet has been considered one of the technologically oriented commercial companies which could shape the landscape of cash services in the last 20th century up to the present day (Aldridge, 2013). It is also known as mobile payments, and it is increasingly affected by people's adaptability and convenience in today's technology (Lee, 2009).

Mobile users are able to make payments using mobile networked devices by means of communication technology and to make them wirelessly and flexible (Dahlberg, Mallat, Ondrus, & Zmijewska, 2008). Mobile Payments includes transactions at Point-of-Sale that are processed via smartphone applications (MCMC, 2018). E-wallet acts as a tool in replacing banks, automated teller machines (ATMs) and even the use of credit cards. More specifically, users may pay their utility bills at their own convenience with their e-wallets or even pay for their movie tickets and parking fees (Pham & Ho, 2015).

In Malaysia, mobile payment is still at an early stage but are gaining popularity (Wei & Tsu, 2018). To promote sharing economy and reduce paper-based cash usage, Bank Negara Malaysia (BNM) is working towards increasing the number of mobile payment transactions, with each person in Malaysia, on average, making 200 transactions per person, as opposed to the initial 44 transactions per person when the initiative began. BNM also aims to cut down cheque use by more than half from 207 million to 100 million per year as it is a goal for them to reach in 2020 (Pikri, 2019). Under the reform, consumers start to familiarize with the mobile payment and also witness the increasing of the numbers of non-bank e-wallet providers (Wei & Tsu, 2018) and the number of mobile payment system users in the coming years (Wong, Tan, Ooi, & Lin, 2014). Due to the reform, the consumer behaviour in terms of the tendency to use mobile payment is worth for investigation.

Due to the government's encouragement, the choices of e-wallet are overloaded. E-wallet such as GrabPay, WeChat Pay, Boost, Fave, Samsung Pay, PayPal, BigPay and more are available in Malaysia to support the digital economy. Based on the augmentation of e-wallet in Malaysia and resources have been allocated to develop various e-wallet it poses a need to understand the users' behavioural intention in using the e-wallet. The intention to use e-wallet is in line with the initiatives of sustainable economic development via sharing economy.

Monetary incentives have been used to promote the use of e-wallet (Mat Arif, 2020). However, the role of non-monetary factors in promoting the use of e-wallet remain unknown in Malaysia. The role of non-monetary determinants will be critical during the post period of monetary incentives. Drawing on the Technology Acceptance Model (TAM), this paper aims to examine the non-monetary determinants of users' intention to use e-wallet particularly on mobile usefulness, mobile ease of use, mobile perceived compatibility, mobile perceived security risk, mobile perceived trust and mobile user mobility as the variables to examine the factors behind user's intention to use e-wallet. The main reason of selecting the TAM theory would be based on its predictive ability which makes it easy to apply in different information system devices (Guriting & Oly Ndubisi, 2006; Kleijnen, Wetzels, & de Ruyter, 2007; Pikkarainen, Pikkarainen, Karjaluoto, & Pahnila, 2004; Venkatesh & Davis, 2000). The results of this study will extend current knowledge on technology acceptance to reflect e-wallet usage.

LITERATURE REVIEW

Over the last couple of years, although several researchers have difficulties in defining 'sharing economy', it has been widely known as peer-to-peer economy, collaborative consumption and networks among several activities (Belk, 2014; Schor, 2017). In other words, it serves as a sharing business platform that creates values for communities with meaningful principles (Martin, 2016). With the radical and disruptive act of mobile technology, the sharing economy is driven by mobile users as it facilities the financial and non-financial activities in a digital space.

Presently, with the developing entrance of the mobile device and the improvement of mobile commerce, mobile payment will turn into an acknowledgement for paying products (Raina, 2014). Mobile payment is the method where a financial transaction is conducted using a mobile device such as mobile phone, smartphone, personal digital assistant (PDA) or any other technologies. This is made possible through the mobile system or by means of diverse wireless technologies along with NFC, Bluetooth, and radio frequency identification devices (RFID) (Ghezzi, Renga, Balocco, & Pescetto, 2010). The Wireless Application Protocol (WAP), online billing, Personal Identifications Number (PIN) and the card transaction using mobile devices enable mobile billing to be made via short messaging (SMS), and billing to be sent directly on the subscriber or on the online website (Kim, Mirusmonov, & Lee, 2010).

In addition, mobile payment allows users to perform transactions online at any place that the environment is allowed (Tan, Memon, Sim, Leong, Soetrisno, & Hussain, 2016; Weir, Anderson, & Jack, 2006), consequently supporting both local and international trading (He, Duan, Fu, & Li, 2006). Mobile payment instruments fall under the category of mobile money, which "includes all non-cash and non-paper payments instruments such as plastic cards and direct transfer and all money transactions via electronic channels" (Singh, 1999, pp. 753).

Although frequently compared to debit cards, e-wallet is compatible to cash as mobile payment provided to the consumers and merchants could allow them to handle small transaction cost-effectively (Van Hove, 2004). Unlike debit or credit cards, transactions using an e-wallet are carried out off-line without the direct involvement of financial intermediaries and the burden of these institutions' high fixed costs (M'Chirgui & Chanel, 2007).

E-wallet in Malaysia

Statistics found that the transaction value in mobile payments segments amounts is up to USD142 and the average transaction value per user is USD136.10 in 2017 in Malaysia (MCMC, 2018). Given the high mobile penetration rate in Malaysia, the mobile phone can readily serve as a means of making and accepting payment with no additional setup costs for example by using Quick Response (QR) code payments whereby it can remove the need for POS terminals (Wei & Tsu, 2018). For the merchants and users, it is healthy competition as all e-wallet suppliers strive to differentiate between incentives, rewards and cashback. However, when serving the lower-tier merchants who often perceived cash as free, it can be a competitive strategy for e-wallet providers whereas subscribing to POS terminal facilities remain a barrier for lower-tier merchants to accept payments cards since they would need to pay a transaction fee for it (Wei & Tsu, 2018). As to this, it is an opportunity for e-wallet providers to provide services whereby they could help to eliminate the payment of Point-Of-Sales (POS) terminal for the lower-tier merchants. But due to the overload of e-wallets that are available in Malaysia, it is necessary to let the users and merchants to realize the value of

the mobile payment so that they may develop a positive intention to use mobile payment services (Dahlberg et al., 2008; Tan, Ooi, Chong, & Hew, 2014), and for e-wallet provider to understand the actual need and wants of the users that could influence them into adopting the intention to use e-wallet.

With the help of NFC technology, the evolution of mobile payment has allowed the user to turn their phones into e-wallet (Pham & Ho, 2015). Nowadays, it is quite often to see consumer uses their mobile phone more than using either cash or card to make purchases. In 2009, the first NFC-enabled mobile payment is known as Maxis FastTap that is launch by Visa in Malaysia. It is a collaboration between Maxis, Visa, Nokia, Maybank and Touch n' Go that make this a success. Due to that, e-wallet has been used in over 1800 merchant outlets around Malaysia (Clark, 2009). Measured by numerous research, consumer adoption is the largest category that can be found in mobile payment research (Dahlberg, Guo, & Ondrus, 2015).

In addition, it is found that the mobile phone is accelerating the on-boarding of an estimated 12 million adults who are currently underserved or unserved to mobile payments by the existing internet banking solution (Demirgüç-Kunt, Klapper, Singer, Ansar, & Hess, 2017). Although the mobile payment landscape in Malaysia remains dominated by banks that accounted for 98.4% and 99.4% of the volume and value of mobile payment transactions, mobile payment services offered by non-banks are starting to gain popular support respectively in 2017. The number of subscribers to mobile payment services offered by non-banks had grown from 0.8 million subscribers in 2017 to 3.4 million subscribers at the end of June 2018. In the first half of 2018, non-bank e-wallet provider processed mobile payment transactions stood at 7.2 million, more than seven times higher than the 1.0 million transactions in 2017 (Wei & Tsu, 2018). This shows the influence of mobile payment services had become a trend for users and merchants to adopt mobile payment services in Malaysia.

Intention to use an e-wallet

The development of the Technology Acceptance Model (TAM) by (Davis, 1989) has found that the behavioural intention is necessary when assessing the use of technologies. To understand how attitude can have an effect on the behaviour, the intention is often used (Huang, Lee, & Hsun Ho, 2004; Lim, Cham & Sia, 2018; Lim et al., 2019). There is empirical evidence that mobile users who assert positive beliefs contain the intention to use mobile technology (Oliveira, Thomas, Baptista, & Campos, 2016; Pham & Ho, 2015) and in this case of study, the intention to use the e-wallet.

Mobile Perceived Usefulness

Mobile Usefulness (MU) is defined as "the degree to that someone believes that by employing a specific system would build up their job performance" (Davis, 1989, pp. 319). It is referring to the extent to which technology is used to achieve the goals of the consumers (Kalinic, et al., 2019; Lim, Cheng, Cham, Ng & Tan, 2015). It is considered to be the main variable of new technology. Previous studies have concluded that when people realize that e-wallet can deliver a different kind of value than any other payment services unable to offer, they would most likely to adopt the intention to use the e-wallet services as e-wallet disclose more advantages than other existing payment methods (Brown, Cajee, Davies, & Stroebel, 2003; Lu, Yang, Chau, & Cao, 2011).

There are numerous studies reported that there is a positive and significant relationship of perceived usefulness on the intention to use an e-wallet. Previous studies have concluded that by allowing users to understand the purpose of mobile payment and e-wallet, it will increase the intention for them to use mobile payment services (Brown et al., 2003; Liébana-Cabanillas et al., 2018; Lu et al., 2011). The researcher in previous studies assumes that users are more likely to accept mobile payment that is easier to use (Al-Majali & Mat, 2011; Cheng & Huang, 2013). Overall, perceived useful is considered as the strongest variables on the acceptance in e-wallet (Pham & Ho, 2015), mobile payments (Zhou, 2014), mobile banking (Riquelme & Rios, 2010), mobile services (Zarmpou, Saprikis, Markos, & Vlachopoulou, 2012).

Perceived Ease of Use

Mobile Ease of Use (MEU) can be considered as an acceptance of a new technology (Kim, Mirusmonov, et al., 2010; Liébana-Cabanillas, Ramos de Luna, & Montoro-Ríos, 2015) as the concept refers to an individual perception towards the simple and effortless operation of a certain system (Cham et al., 2018; Davis, 1989). Mobile Ease of Use is considered as a construct in the adoption of mobile devices even though there is still some technical limitation on mobile technologies.

There are relevant influence between mobile ease of use towards the intention to use e-wallet by the researcher regarding the acceptance of mobile payment (Kim et al., 2010; Yang et al., 2015), mobile banking (Riquelme & Rios, 2010) and even mobile banking with mobile payments (Liébana-Cabanillas et al., 2018; Zhou, 2014). It is was confirmed that both SMS and NFC mobile payment has a significant influence on mobile ease of use (Liébana-Cabanillas et al., 2018).

Mobile Perceived Compatibility

Perceived compatibility has recommended in the Innovation Diffusion Theory (IDT) by (Rogers, 2003) as a determinant of attitude to the use of technology and predetermining its intended use (Liébana-Cabanillas et al., 2018). Compatibility is known as one of the important variables for the new technology with the high compatibility perceived by the fast adoption of any new technologies and particularly e-wallet. It refers to innovation is consistent with the need of potential users, the existing values and the past experiences (Rogers, 2003). Referring to the diffusion of new technologies, compatibility is relevant since it can help to reduce the uncertainty towards the technologies (Su, Wang, & Yan, 2018).

It raises the awareness of usefulness to the users when the mobile payment is compatible with the user needs and lifestyles and the users would willing to try out a new service (Ding, Iijima, & Ho, 2004). The user would mostly use e-wallet if the compatibility is high as they can use it in their daily life and habits. In other words, when the user uses the new payment services and integrates it into their everyday life, the e-wallet is predicted to have control on the users' intention to use. In the previous mobile payment studies, it is found that there is a positive relationship between compatibility and intention to use (Ding et al., 2004; Kapoor, Dwivedi, & Williams, 2015).

Mobile Perceived Security Risks

Mobile perceived security risks is known as an important variable on the users' intention to use mobile technology services (Shin, 2009). Mobile perceived security risks is to determine the perception of security against making mobile transaction especially the risk of losing important information, which could turn into financial losses (Ooi & Tan, 2016). Uncertainty is a potential feeling when using technology (Cheng, Liu, Song, & Qian, 2008). The reason why perceived security is one of the intentions to use e-wallet is due to the continuous development of technologies and the effort to promote them. Consumers would feel safer when using mobile payment if there are tools to protect the payment systems if there are any undesired actions happen.

Risk can be predicted and acceptable while using mobile technology, as to that, consumers would need to take a particular level of risk while using a new service (Lim & Cham, 2015; Liu & Tai, 2016). The risk would include the risk of financial loss, the quality of the product and the uncertainty about the identity of the consumer who makes a transaction with a stranger. The possibility of personal information, financial information and money stealings hinge users from adoption (Kalinic et al., 2019). Through previous researches, perceived risk is known as one of the variables that prevent consumer to adopt into innovation and in particular, mobile commerce. When a customer perceives that e-wallet is a risky activity, they would most likely not adopt into the system as they are concerned with the cost of using e-wallet services. Thus, it is proposed through previous studies (Cho, 2004; Liu & Tai, 2016) that perceived security has a significant impact on the intention of use on mobile payment services. While Mobile Perceived Security Risk is considered to be important, interesting findings by (Tan et al., 2014) found that perceived risk does not influence the intention to use e-wallet in Malaysia.

Mobile Perceived Trust

Mobile Perceived Trust is defined as a belief that a technological solution is secure and trustworthy or not (Dahlberg et al., 2008). When the consumers feel the service provided is honest and reliable, it would mostly increase the consumer intention to use the service since they have high belief level in it (Cham, Lim, Cheng & Lee, 2016; Gefen, Karahanna, & Straub, 2003). Commonly, consumers' trust can greatly affect the intentions to use mobile service-by-service providers or payment services (Arvidsson, 2014). Confidence in technologies contributes to improved assessments and attitudes on technologies, in which the technology criteria meets the promise and are reliable and safe will have a positive effect on the intention to use (Kalinic et al., 2019). Through several studies, consumers are found to be more willing to use mobile payment services if the providers are trustworthy enough (Dahlberg et al., 2008). Consumers pay for the services that they require while making a transaction as they expect that their personal data must be confidential and would not be shared with any other parties (Zhou, 2014). Trust has been found to have an influence on the consumers' willingness to use mobile transactions (Gefen et al., 2003; Jarvenpaa, Tractinsky, & Saarinen, 2006). There are several types of research determine that perceived security and trust has a significant relationship towards mobile commerce success (Siau, Sheng, Nah, & Davis, 2004; Xu & Gutierrez, 2006).

User Mobility

Mobility can be one of the variables required for mobile devices. Through mobility, consumers can benefit from the flexibility of using the services in any place they need (Amberg, Hirschmeier, & Wehrmann, 2004). E-wallet is now a great fit in modern times, allowing consumers to access services via a wireless network using a wide range of mobile devices (Au & Kauffman, 2008). Due to mobile payment tools, consumers would not have to go to the store and can only buy them in an internet environment covered with mobile phones (Ding et al., 2004). The mobile payment provides users with accurate and efficient access to their information in all locations during wireless network transactions (Anckar, & D'incau, 2002).

Mobile services offer a way of shopping in any situation as they fit the mobile lifestyle. Thanks to mobile devices, the customer can enjoy the e-wallet free of any constraints, as they can carry out transactions anywhere in the environment (Gao, Waechter, & Bai, 2015). Thus, it is known that mobile users could have a positive perspective and more likely to use e-wallet (Schierz et al., 2010a).

Research Hypotheses and Conceptual Framework

The theoretical study utilizes a new model of 'Mobile Technology Acceptation Model' (MTAM), consisting of mobile usefulness (MU) and mobile ease of use (MEU). The study also proposed the development of four new mobile constructs: Mobile Perceived Security Risk (MPSR), Mobile Perceived Compatibility (MPC), Mobile Perceived Trust (MPT) and Mobile Perceived Financial Source (MPFR) to increase overall predictability. Based on the MTAM described above, the following hypotheses are developed:

H1: *There is a positive significant relationship between mobile usefulness and intention to use e-wallet.*

H2: *There is a positive significant relationship between mobile ease of use and intention to use e-wallet.*

H3: *There is a positive significant relationship between mobile perceived compatibility and intention to use e-wallet.*

H4: *There is a positive significant relationship between mobile perceived security risks and intention to use e-wallet.*

H5: *There is a positive significant relationship between mobile perceived trust and intention to use e-wallet.*

H6: *There is a positive significant relationship between mobile user mobility and intention to use e-wallet.*

Conceptual Framework

Figure 1: Research Framework
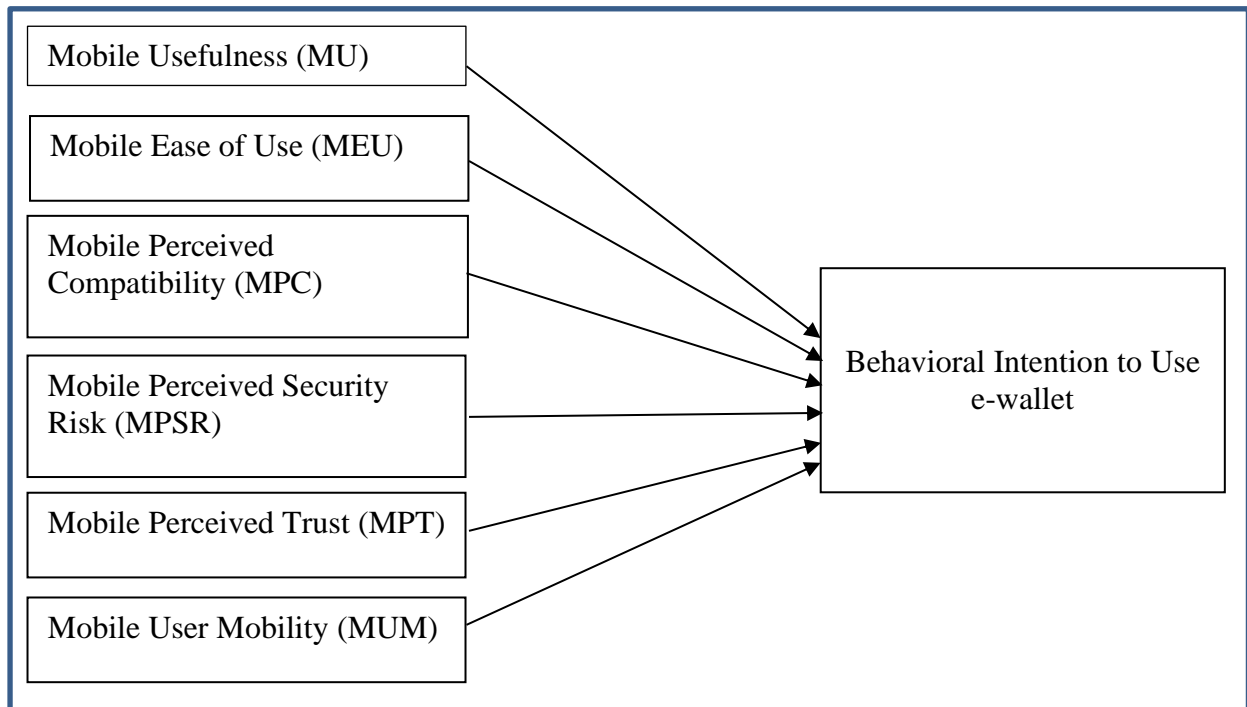
RESEARCH METHOD

In order to examine the determinants of e-wallet user intention in Malaysia, a self-administered questionnaire was developed. Purposive sampling method was used to select the users who have the experience in using web-based mobile payment but not the e-wallet application in the smartphones. An online questionnaire was used to collect data from the respondents. The sample size was calculated using GPower statistical software and the results indicated that a minimum amount of 98 respondents is needed. 250 questionnaires were distributed, and 233 respondents were used for the analysis after the data cleaning process.

The questionnaire was divided into three sections. Section A is where the respondent fills in their demographic profile such as their gender, age, the period of online payment use, and frequency of online payment use per month. Section B is designed to learn about the respondent's response towards the independent variable which includes mobile usefulness, mobile ease of use, mobile perceived compatibility, mobile perceived security risk, mobile perceived trust and mobile user mobility. Section B relates to the factors which involve the intention to use e-wallet among mobile users. Section C is designed to assess the dependent variable which is the intention to use the e-wallet. There are 29 measurement items on the independent and dependent variable in Section B and C. The five items of mobile usefulness are adapted from Davis, Bagozzi, & Warshaw (1989) and Leong et al. (2013). The four items of mobile ease of use are adapted from Davis et al. (1989) and Tan et al. (2014). As for mobile perceived compatibility, there are two items that are adapted from Lu & Su (2009). Next, there are seven items of mobile perceived security risk adapted from Tan et al. (2014) and three items of mobile perceived trust are adapted from Leong et al. (2013). The three items of mobile user mobility are adapted from Kim, Tao, Shin, & Kim (2010) and lastly, the

five items of the intention to use are adapted from Leong et al. (2013). All variables are measured on 7 Likert Scales where 1 indicates strongly disagree while 7 denotes strongly agree.

RESULTS

Table 1: Demographic Profile of Respondents

Variables		Frequency	Percentage
Gender	Male	84	36.1
	Female	149	63.9
Age	Below 20	34	14.6
	21-25	118	50.6
	26-30	33	14.2
	31-35	21	9.0
	36-40	9	3.9
	Above 40	18	7.7
Period of online payment use	Less than 3 years	161	69.1
	3-6 years	46	19.7
	More than 6 years	26	11.2
Frequency of online payment use in a month	1-3 times	129	55.4
	4-10 times	80	34.3
	11-20 times	19	7.7
	Others	6	2.6

Table 1 showed a summary of the demographic profile of 233 respondents. Majority of the respondents were female (63.9 per cent). Most of the respondents were aged between 21 years to 25 years. There were 69.1 per cent of the respondents had less than 3 years of experience in online payment. Besides, more than half of the respondents (55.4 per cent) made online payment from one to three times a month.

Assessment of Measurement Model

Table 2: Outer Loadings, Composite Reliability and AVE

Variable	Items	Loadings	Composite Reliability	Average Variance Extracted (AVE)
Mobile Usefulness (MU)	MU1	0.919	0.947	0.782
	MU2	0.894		
	MU3	0.852		
	MU4	0.883		
	MU5	0.873		
Mobile Ease of Use (MEU)	MEU1	0.824	0.908	0.711
	MEU2	0.845		
	MEU3	0.852		
	MEU4	0.850		
Mobile Perceived Compatibility (MPC)	MPC1	0.941	0.937	0.881
	MPC2	0.936		
Mobile Perceived	MPSR1	0.554	0.892	0.551

Security Risk (MPSR)	MPSR2	0.608		
	MPSR3	0.577		
	MPSR4	0.732		
	MPSR5	0.862		
	MPSR6	0.892		
	MPSR7	0.877		
Mobile Perceived Trust (MPT)	MPT1	0.919	0.821	0.621
	MPT2	0.892		
	MPT3	0.473		
Mobile User Mobility (MUM)	MUM1	0.855	0.827	0.616
	MUM2	0.784		
	MUM3	0.709		
Behavioural Intention to Use e-Wallet (IU)	IU1	0.910	0.959	0.825
	IU2	0.933		
	IU3	0.907		
	IU4	0.908		
	IU5	0.883		

The results for the assessment of the measurement model were presented in Table 2. The loading values were ranged from 0.473 to 0.936. The loading value greater than 0.4 was acceptable given the average variance extracted (AVE) value was greater than 0.5 (Hulland, 1999). All AVE values were greater than 0.5 and therefore internal consistency was achieved. All composite reliability values for the constructs were greater than 0.7, which had met the requirement for reliability.

Table 3: Discriminant Validity

	IU	MEU	MPC	MPSR	MPT	MU	MUM
IU							
MEU	0.427						
MPC	0.575	0.592					
MPSR	0.094	0.144	0.206				
MPT	0.408	0.268	0.565	0.532			
MU	0.570	0.591	0.823	0.193	0.524		
MUM	0.444	0.536	0.486	0.485	0.576	0.524	

The discriminant validity of the constructs was checked by performing Heterotrait-Monotrait (HTMT) ratio of correlations. Table 3 exhibited the results of HTMT and all values are lower than the threshold value of $HTMT_{0.85}$ suggested by Kline (2015). Therefore, discriminant validity has been achieved.

Assessment of Structural Model

Table 4: Path Relationship Assessment

PR	PC	SD	T	P	CI		VIF	f^2	R^2	Q^2
MU -> IU	0.261	0.097	2.691	0.004	0.091	0.417	2.482	0.043	0.364	0.276
MEU -> IU	0.084	0.071	1.174	0.120	-0.031	0.206	1.586	0.007		
MPC -> IU	0.194	0.102	1.900	0.029	0.016	0.353	2.488	0.024		
MPSR -> IU	-0.119	0.071	1.689	0.046	-0.198	0.035	1.375	0.016		
MPT -> IU	0.155	0.075	2.074	0.019	0.021	0.264	1.653	0.023		
MUM -> IU	0.128	0.068	1.871	0.031	0.010	0.234	1.499	0.017		

Note: PR = Path Relationship; PC = Path Coefficient; SD = Standard Deviation; T = T Statistics; P = P Values; CI = Confidence Interval

The assessment of structural model began with the checking of collinearity. Variance inflator factor (VIF) was employed and all VIF values for independent variables in Table 4 were less than 3.3 criteria of Hair et al. (2011). As a result, there is no issue of collinearity for the independent variables. The path coefficients were generated to assess the significance of the structural model relationships using the bootstrapping approach.

Mobile usefulness ($\beta = 0.26$, $p < 0.01$), mobile perceived compatibility ($\beta = 0.19$, $p < 0.05$), mobile perceived trust ($\beta = 0.16$, $p < 0.05$), and mobile user mobility ($\beta = 0.13$, $p < 0.05$) were significant and positively related to intention to use e-Wallet. Thus, H1, H3, H5 and H6 were supported. Conversely, mobile perceived ease of use and mobile perceived security risk was insignificant and thus rejected H2 and H4.

The coefficient of Determination (R^2) was used to identify the predictive accuracy of the model. The value of 0.36 indicated a substantial level of predictive accuracy according to Cohen (1988). Cohen's f^2 was also used to examine the effect size of the predictor constructs (Cohen, 1988). Mobile usefulness, mobile perceived compatibility, and mobile perceived trust demonstrated a small effect size. In terms of the predictive relevance (Q^2), the value was greater than zero and therefore suggested the presence of predictive relevancy between independent and dependent variables.

Table 5: PLS predict Analysis

Item	PLS-SEM		LM	PLS-SEM - LM
	RMSE	Q^2	RMSE	RMSE
IU2	0.9	0.318	0.944	-0.044
IU1	0.891	0.269	0.924	-0.033
IU3	0.877	0.302	0.923	-0.046
IU5	0.948	0.22	0.998	-0.050
IU4	0.901	0.222	0.972	-0.071

Finally, the PLSpredict was performed to verify the predictive power of the model (Shmueli, 2019). Table 5 showed the results of the degree of predicting errors of behavioural intention in using the e-wallet. Root mean squared error (RMSE) statistic, which enables estimation of prediction errors that are symmetrically distributed, was used to compare the predictive

performance of PLS-SEM model and naïve linear regression (LM) benchmark model. When RMSE statistic values of PLS-SEM model were compared to LM benchmark model counterpart, all indicators in PLS-SEM analysis showed lower RMSE values. Consequently, PLS-SEM model has high predictive power.

DISCUSSIONS

The findings revealed that perceived usefulness is a significant determinant of intention to use e-wallet. The result is consistent with the findings from previous studies such as Wei, et al. (2009); and Liébana-Cabanillas et al. (2018). In other words, if users find that the use of e-wallet benefits them, they will have the tendency to use the e-wallet. On the other hand, the result of perceived ease of use was inconsistent with Kim et al. (2010) that mobile ease of use has been found to have a significant relationship with intention to use the e-wallet. As the usage of e-wallet is still at its early stage, for instance, many mobile users just started to install e-wallet as a result from the announcement of the recent incentives by the government, the users may yet find out e-wallet is simple and effortless compared to other payment methods. For mobile perceived compatibility, the finding of this study is aligned with Liébana-Cabanillas et al. (2018) that this factor is a critical determinant of intention to use the e-wallet. The usage of e-wallet is compatible with the users' life or work in Malaysia. Conversely, the mobile perceived security risk is not a significant determinant of intention to use e-wallet in Malaysia. The users may yet aware of the risk of losing personal information to scammers and cyber-scams. For mobile perceived trust, the finding is in line with the result of Kim, Ferrin, & Rao (2008). Credentials are the concern of the users regarding the usage of e-wallet. The results of this study also showed that mobile user mobility is significantly related to intention to use an e-wallet. This is consistent with the finding of Schierz, Schilke, & Wirtz (2010) that the mobile payment system provides the users with time and place invariant to use a mobile payment system.

This research is carried out to assess the significant relationship between non-monetary determinants such as mobile usefulness, mobile ease of use, mobile perceived compatibility, mobile perceived security risk, mobile perceived trust, mobile user mobility towards the intention to use e-wallet among the population in Kuching. The results show that mobile usefulness, mobile perceived compatibility and mobile user mobility have had a significant influence on the intention to use an e-wallet. However, mobile ease of use, mobile perceived security risk and mobile perceived trust were found to be not significant with the intention to use e-wallet among the population of Kuching. From the results of the study, there is substantive evidence to support that e-wallet is acknowledged by the communities in Malaysia and should be encouraged as part of the sharing economy activities as a means to promote sustainable economic growth.

MANAGERIAL IMPLICATIONS

Theoretically, this study contributes to the literature of mobile payment user behavioural intention by investigating the e-wallet user intention using a mobile technology acceptance model. The variables used comprises mobile usefulness, mobile ease of use, mobile perceived compatibility, mobile perceived security risk, mobile perceived trust, and mobile user mobility. This study extends the knowledge of the model by introducing a mobile user mobility factor to explain the e-wallet user intention.

Practically, the e-wallet service providers can offer services that other payment services are unable to offer to enhance the tendency to use their e-wallets. In other words, e-wallet service providers need to offer competitive payment services in order to attract new users. Besides, the service providers can offer some other features in e-wallet such as loyalty program, rebate, point's accumulation for exchanging of other product or services as well as promotions. E-wallet service providers may focus on developing and utilizing marketing communication that highlights the compatibility of the application with users' cases and highlights the benefits of using e-wallet in differing lifestyles among their target markets. During the digital era, which encourages for the e-wallet usage, the public authorities can create awareness on cyber-scams and the importance to protect personal information. E-wallet service providers should build credentials for the users to develop user confidence in an uncertain environment and operation. Without trust, the users may have doubts as to who is accountable for any transaction errors or unauthorized transactions. The industry players may segment and prioritize their potential customers. As Malaysia market is still at the early stage, firms can identify and focus on users who are eagle to pay for goods and services in their daily transactions. This group of users may inspire fewer mobile consumers in using the service later on. These managerial implications are vital in the long run as monetary factor serves as short-term strategies to boost the e-wallet user intention.

FUTURE RESEARCH DIRECTIONS

Future researchers can consider expanding this research to other communities in Malaysia and other parts of the world to produce more accurate and reliable data. Furthermore, a further recommendation can incorporate other variables such as attitude into the proposed research framework.

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