



Factors that influence the intention to use E-wallet among Generation Z in Malaysia

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Abstract. The emergence of e-wallet is gaining momentum around the world. People are switching to e-wallet to pay for their purchases. The Malaysian government is also promoting the usage of e-wallet through several initiatives. Nevertheless, the e-wallet usage is considered still low. Therefore, the current study's purpose is to identify how factors such as social influence, perceived usefulness, security system, perceived risk, and facilities condition can influence the intention to use e-wallet. Around 200 responses are obtained using the convenience sampling technique. The results revealed that perceived usefulness, security system and facilities conditions significantly influence the intention to use e-wallet among generation Z. However, social influence and perceived risk do not influence e-wallet usage intention. The results provided the insight on how to encourage and increase e-wallet usage among Malaysian. Since the government is also promoting payment using e-wallet the finding of this research is essential to develop the appropriate policies.

Keywords: intention to use, e-wallet, perceived usefulness, security system, facilities condition

1 Introduction

The usage of digital money is gaining momentum. Evolution of money has moved to digital money or digital currency. One form of digital money is e-wallet which is an application that links with any credit card, debit card or bank account. It is considered secure for the user [1]. The Malaysian government is looking to increase the usage of e-wallet with the vision for a cashless society. They initially launched e-Tunai for this purpose. ePanjana was launched next during the pandemic where eligible Malaysians received RM50 from a selected e-wallet partner such as Touch & Go (TNG), Boost and GrabPay [2]. The purpose is to increase the e-wallet usage and reduce the spread of virus through cash transaction. The e-wallet usage is seen to have impact on the commerce, financial markets and payment systems in Malaysia [3]. Many countries are evolving towards cashless society such as China. Although e-wallet has been available in Malaysia, the acceptability rate and the usage rate are still considered low. According to [4] majority of Malaysians are unaware of the benefits of e-wallet.

Previous studies on e-wallet have been done in Malaysia [5, 6, 7, 8], Indonesia [9,10,11] and Vietnam [12]. [5] studied on perceived risk in terms of Malaysian youth's e-wallet acceptance, while [3] focused on determinants of e-wallet's usage intention. [6] study focused on the factors that Malaysia's young adults are concerned on, in terms of their e-wallet usage intention. [7] study was also on e-wallet usage intention which was done during the pandemic, while [8] study was on consumer's perception on e-wallet in Selangor. Although some studies focused on adults however, others concentrated on young adults and college students. This is because they are an important target group for e-wallet usage. Furthermore, the government is continuously providing initiatives to inculcate the culture of using e-wallet. Budget 2023 has allocated RM400 million where each youth age between 18-20 will received RM200 through ePemula eWallet programme. This means the trend of younger generation including Generation Z will see a rise in the trend of using e-wallet. Having a continuous study on e-wallet indicates it to be an important topic. It is critical to understand what drives the intention to use e-wallet and concentrate on these factors to further increase the usage. The study aims is to determine the influence of variables such as social influence, perceived usefulness, security, perceived risk and facilities condition on the intention to use E-wallet among Generation Z in Malaysia.

2 Literature Review

Generally, behavioural intention can be referred as the strength of intention a person has in performing a certain activity [13]. It has been used in a number of models such as the Technology Acceptance Model. Both the qualitative and quantitative methods have been used to study the intention to use e-wallet. The quantitative methods were applied by [9] and [14] which were done in Indonesia and Malaysia respectively. [15] used qualitative method in their study in Vietnam. In the study done by [16] both methods have been used.

Social influence is the level a person believes that important people should utilize technology [17]. This influence can come from family, friends, or colleagues and the influence is on the ability to change one's mind in accepting a technology that will be important. [12] pointed out that the social influence affects the e-wallets usage behavior in their study of Vietnam's youth while [18] indicated social influence can affect e-wallet acceptance among undergraduates in Malaysia. [10] and [11] found the factor can affect behavioral intention to use e-wallet in Indonesia. Based on this, the hypothesis is developed:

H1: Social influence significantly affects the intention to use e-wallet.

Perceived usefulness is the level, one believes that a use of a certain application will be able to enhance the performance experience [19]. [5] study on Malaysian youth found it to be significant in terms of e-wallet acceptance. Similar observations were found by [20] and [21] in their study of Malaysian university students. [7] and [22] also found perceived usefulness affects e-wallet's adoption. Thus, the following hypothesis is formulated:

H2: Perceived usefulness significantly affects the intention to use e-wallet.

According to [23], security of e-wallet is the level of believe customers has in the safety of using a specific payment method via the mobile application. [6] whose study was on Malaysian young adults found security significantly and positively influence the behavioural intention to use e-wallet. Similarly, [24] found security is a concern in terms of e-wallet usage during the pandemic. Therefore, the hypothesis is formulated as follows:

H3: Security system significantly affects the intention to use e-wallet.

Perceived risk is the thought of possible adverse consequences which could arouse when a particular service is used [25]. According to [26] risk due to security is the main concern in using e-wallet. [14] study found perceived risk influence e-wallet's adoption during the pandemic. It was found in their study in Indonesia and Malaysia. Therefore, the study proposed the following hypothesis:

H4: Perceived risk significantly affects the intention to use e-wallet.

According to [17] facilities conditions refers to how the infrastructure both technical and organizational can assists a technology's adoption and usage in a convenient manner. Facilities include the resources to use the systems such as knowledge, compatibility with other systems and having one to assist in using the system. [12] found that the facilitating conditions factor affects the behavior of using e-wallets among youth in Vietnam while [18] indicated facilities conditions influence e-wallet acceptance among undergraduates in Malaysia. In the study by [27] facilitating condition is the most importance factor in user's acceptance toward cashless society in Malaysia. [28] found facilitating condition to have a positive influence on the behavioural intention among M40 millennials. In addition, [29] and [30] state that facilities condition has positive affect on the behavioural intention to use digital e-wallet. Therefore, the hypothesis of this study is developed as follows:

H5: Facilities condition significantly affects the intention to use e-wallet.

3 Methodology

The research design of this study is using the quantitative approach. The research framework is presented in Figure 1. Quantitative approach is suitable since the data collected through the questionnaires is coded into numeric numbers and statistical analysis is then performed. The respondents consist of Generation Z. Convenience sampling method is used to select the respondents. This method is simple and cost efficient. The sample size is around 200 respondents. According to G-power, a sample size of 138 is suitable if there are five variables. Thus, the sample size of this study is appropriate. The measurement of variables for the questionnaire in this study is based on the existing literature which include [31, 32, 14, 33]. There are three sections in the questionnaire. The first section are questions related to the respondent's demographics, while the second section is questions related to the independent variables and the last part is questions on the dependent variable. The questionnaire is distributed via online using Google form. This method is convenient and saves time and cost. After the pilot testing, the reliability was tested. This is followed by the field survey. The data collected is analysed using the SPSS.

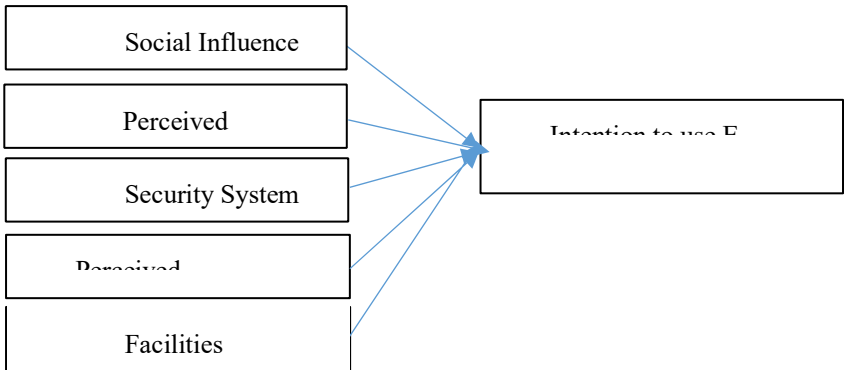


Figure 1: Research framework

4 Results

Table 4.1 presents the respondents' demographic characteristics. In terms of gender, there are more female (102) compared to male (98). The highest group of respondents is in the age group between 20 to 24 years old consists of 128 respondents or 64%. Respondents between 15 to 19 years old of age accounted for 72 respondents (36%). Chinese respondents are the highest with 138 (69%), followed by Malay with 32 (16%) and Indian with 30 (15%). Majority of the respondents is spending between RM100 –

RM200 using e-wallet which have 58 respondents or 29%. This is followed by 56 respondents (28%) who is spending less than RM100 per month. Next is 55 respondents (27.5%) who is spending between RM201 – RM300 monthly. Those spending between RM301 – RM400 consists of 21 respondents (10.5%) and 10 respondents (5%) are spending more than RM400 per monthly. The application used by respondents are mostly TouchNGo, followed by GrabPay and Boost. Others are WechatPay and AliPay. Generally, e-wallet is used to purchase food and beverage, followed by food deliveries, groceries, transportation and bill payment.

Table 1 Demographic Characteristics

Gender	Male	98	49
	Female	102	51
Age	15-19 years old	72	36
	20-24 years old	128	64
Ethnicity	Malay	32	16
	Chinese	138	69
	Indian	30	15
Monthly consumption	< than RM100	56	28
	RM101-RM200	58	29
	RM201-RM300	55	27.5
	RM301-RM400	21	10.5
	More than RM400	10	5

Table 2 Reliability Analysis

Variables	Cronbach's Alpha
Social Influence (SI)	0.872
Perceived Usefulness (PU)	0.866
System security (SS)	0.900
Perceived Risk (PR)	0.761
Facilities Condition (FC)	0.732

Table 2 presents the results of the reliability analysis for all the variables. All the variables are found to be reliable. This is because the Cronbach's Alpha value is above 0.7.

Next, is the results of the multiple regression analysis. Table 3 presents the results. The R-value is 0.705 while the R Square is 0.497 which means that 49.7% of variance is explained by the independent variables. The F-value is 38.331 and p-value is 0.000.

This indicates there is a model fit. Therefore, it shows that at least one of the independent variables (social influence-SI, perceived usefulness-PU, security system-SS, perceived risk-PR and facilities conditions-FC) can predict the intention to use e-wallet.

Table 3 Regression Analysis

R	R-square	Adjusted R-square	F	Sig
.705 ^a	.497	.484	38.331	<.000 ^b

Table 4 presents the Multiple Linear Regression's coefficient results. Out of five variables three of the variables are found to be significant predictors of the intention to use e-wallet. The variables are perceived usefulness, security system, and facilities condition. This is due to their p-values being less than 0.05. Based on the results three hypotheses are accepted which include H2, H3 and H5. Social influence and perceived risk have p-value of above 0.05. Thus, these two factors do not have significant relationship with the intention to use e-wallet. This means that H1 and H4 are not accepted.

Table 4: Coefficient Table

	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig
(Constant)	.383	.286		1.339	.182
SI	.035	.057	.040	0.620	.536
PU	.430	.066	.415	6.547	.000
SS	.167	.050	.216	3.331	.001
PR	.043	.057	.042	0.750	.450
FC	.206	.068	.190	3.043	.003

5 Discussion

E-wallet has become an important form of payment without the hassle of having to deal with paper money. The Malaysian government has also introduced policies such as E-penjana to motivate the usage of e-wallet among the younger generation. Therefore, this study has been conducted to identify the factors that affect the intention to use e-wallet among Generation Z in Malaysia. The factors are social influence, perceived usefulness, security system, perceived risk and facilities condition.

It is found that perceived usefulness influences the intention to use e-wallet. The result indicates, the Beta value is 0.415 and the significant value is 0.000. The current result is in line with [22, 7, 20, 21]. All these studies pointed out that perceived usefulness

influences the intention to use e-wallet. Therefore, to encourage e-wallet usage, the users must be able to see the usefulness of the technology. Next is security systems which is also found to influence the intention to use e-wallet. The Beta value for security system is 0.216 and the significant value is 0.001. The result of this study is similar with [24] study who pointed out that security is an important factor in the e-wallet's usage intention during the pandemic. This means the security system of the e-wallet must be convincing to the users for them to use this form of payment. The study found facilities condition to have a significant relationship with the intention to use e-wallet. The Beta value for facilities condition is 0.190 and the significant value is 0.003. The finding is supported by [30, 12] who found that the facilities condition influences the intention to use e-wallet. Therefore, to support the usage of e-wallet the required infrastructure is very important.

Two factors are found not to influence intention to use e-wallet which include social influence and perceived risk. In terms of social influence, the Beta value is 0.040 and the significant value is 0.536. The result of this study is supported by previous study where several researchers show that social influence have low impact in the intention to use e-wallet [34]. This means, the users are generally not influenced by people close to them in their decision to use e-wallet rather, they make their own decision. In addition, Generation Z is used to the culture of digitalisation and considers e-wallet as an essential form of payment. Perceived risk is found not to be an influencing factor on the intention to use e-wallet in this study. The Beta value is 0.042 and the significant value is 0.450. This probably because the users do not consider perceived risk as an essential factor in their intention to use e-wallet. The result is similar with previous study by [3, 35] which are studies done in Malaysia and Vietnam respectively. This is probably because Generation Z considers the other factors to be more critical and the e-wallet is safe enough for their usage.

6 Conclusion

The study found the Generation Z in Malaysia are influenced by perceived usefulness, security system and facilities conditions in their intention to use e-wallet. The users will have their own perspective to decide whether e-wallet could be really helpful for them or not compared to the traditional transaction method such as cash payment. Therefore, it is critical for the potential user to recognise the perceived usefulness of e-wallet payment. There should be efficiency and convenience to making transaction. Secondly, e-wallet application needs the personal information from the user such as identity card number, bank information and transaction details. These are all confidential information which once the information is known to the hacker it will definitely harm the particular user such as theft of personal data or losing money. This will also have an impact on the credibility of the system. Thus, the user will be concerned on the security system. Facilities condition is also influencing the intention to use e-wallet. To ensure there is increase in the e-wallet usage, the system should have a stable and efficient infrastructure. There should not be any interruption during the transaction or else it will

cause several problems such as fail to pay or failure in the acceptance of order. Although perceived risk and social influence are found not to influence Generation Z, nevertheless, issue of risk will discourage the usage of e-wallet thus, the safety of e-wallet transactions are necessary. Similarly, social influence in some studies have shown to influence, therefore to promote e-wallet a proper mechanism is necessary especially among young adults.

The findings are able to enrich the existing literature in this area. It is able to provide further support for the study in the area of intention to use e-wallet specifically in term of Generation Z. In addition, the findings contribute to the knowledge from the Malaysian perspective. Future researchers may consider similar factors or other factors in their study. The result of the analysis is able to serve as a valuable reference for the researchers to support their future studies on the similar topic as well. From the seller's and the e-wallet providers' perspective, they should focus on what is critical to the customers in terms of the payment system. In order to encourage sales and satisfy the customers, perceived usefulness, systems security and facilities conditions are important. They will also be able to serve the customers better. Besides that, the government may benefit from studies such as this since it provides the information related to factors that influence the intention to use e-wallet. This may assist in coming up with a new plan or policy to further increase the number of users to use e-wallet. The government should ensure that the customers are protected especially in terms of the security of personal data. Clear policies to protect the confidentiality of information and having a safe and secure payment system will encourage more people to use e-wallet. The strength of the internet connection is another area where the government may need to look into. Government may also provide support to businesses in terms of training and workshop to encourage business owners to offer e-wallet as a mode of payment. All these will support the movement towards a digital society which is a part of the government agenda.

The study has its limitation. The sample size limits the generalisation of the findings to a bigger population. Next, the study considered only five variables. Thus, there are several recommendations for future study. Future researchers may consider to identify the influence of the variables in the intention to use e-wallet in a different research setting. Future researchers may evaluate if the independent variables such as social influence and perceived risk influence the need to use e-wallet among Generation Z. Other recommendations include considering a bigger the sample size to increase the generalisation of findings to a bigger population. A mixed method study to capture the critical information from the users of e-wallet can also be considered.

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