A Study on Consumer's Perception of E-Wallets in Selangor

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ABSTRACT

The use of e-wallets has started to increase since Malaysia was hit by Covid-19. Economic sectors that restrict freedom of movement and face-to-face meetings have led many merchants to use e-wallets and electronic payment systems. This is especially noticeable when the installation of e-wallets is no longer concentrated in malls or stores but now e-wallets have also been used by small vendors on sidewalks, food trucks, and stalls. This phenomenon is a good sign for a cashless society. Accordingly, this study was conducted to look at consumers' perceptions of the use of e-wallets in the payment of their purchases. The scope of this study is consumers in the state of Selangor. A total of 150 respondents answered the questionnaire conducted online using the google form platform. Data for this study were analyzed using SPSS software. The findings of the study showed that users' perceptions of ease of use and usefulness were at a high level with an overall mean score value of 4.95 and 4.15 respectively. Consumer attitudes towards actual consumption were also at a high level with an overall mean score value of 3.95. In addition, the findings of the study also show that users' perceived ease of use and perceived usefulness have a significant relationship with users' attitudes towards e-wallets.

Keywords: E-payment, Digitalization, Perceived ease of use, Perceived usefulness, Attitude

INTRODUCTION

The new digital wave in the world market has created many opportunities for businesses and customers. Businesses can widen their business coverage, build a more effective relationship with customers and suppliers, reduce operational costs, and increase speed and efficiency, especially when dealing with customers. Customers on the other hand may get benefit from greater product access and selection, access to comparative information, and able to decide on a purchase immediately.

E-wallets have been introduced during digital transformation in the market. This digital wallet allows financial transactions through the use of a certain application that runs on a mobile device. With e-wallets, the payment method will be easier and faster. For example, users with an account will be given a QR code, and all money transfers to other parties only by using the code. Consumers and traders only need to scan the QR code then the money will be able to transfer to each other. The function of an e-wallet is similar to a physical wallet. The difference is in terms of the payment method. The physical wallet requires cash while the E-Wallet requires a smartphone to use it. Among the popular e-wallets in Malaysia are GrabPay, BigPay, Touch n Go, Boost, Vcash and Razorpay.

The technological sophistication available on this e-wallet will be one of the drivers in the future. One day we may be presented with more advanced technology that only requires a fingerprint or retina of the eye to transfer money directly. This is because, the blockchain technology that uses the retina of the eye as an identity has been used by the United Nations (UN) as a sender of aid for humanitarian missions to ensure it is transparent, safe and continues to reach the right parties (Bacchi, 2017).

The e-wallet was first used in Malaysia in 2017. However, the customer's and businesses' levels of acceptance and awareness of the existence of e-wallets are still low. Based on the observation of the e-wallet trend in Malaysia, the market is still in its infancy (Trotman, 2021).

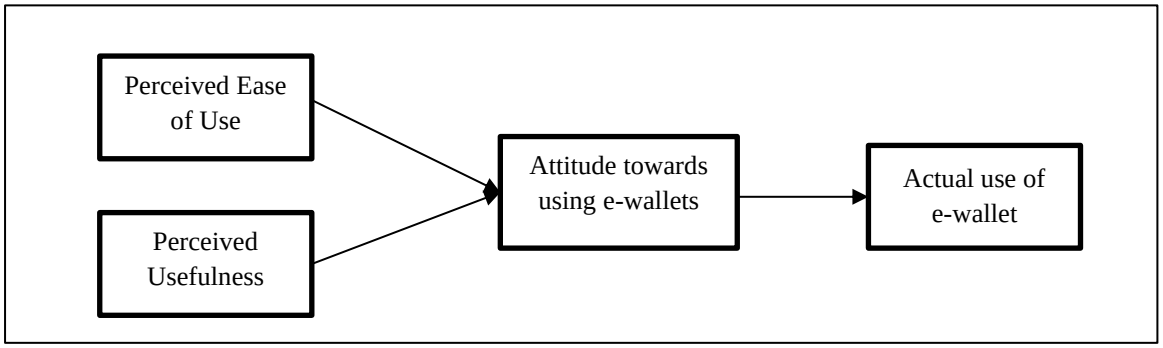
To encourage the usage of an e-wallet, the government also plays its role. In 2020, the government giving an incentive of RM50 which can be claimed through the touch n go e-wallet (Anonymous, 2020). In 2021 government give an incentive of RM300 million to youth in terms of e-wallets (RM150 per person). This incentive can be claimed from e-wallet service providers including BigPay, Boost, ShopeePay, and Touch 'n Go eWallet ((MOF), 2021). In 2022, the government gives incentives under the ePemula program to Malaysians aged 18-20 years old or full-time students at IPTA / IPTS, RM150 in the form of e-cash credit which also can be claimed through BigPay, Boost, ShopeePay, and Touch 'n Go eWallet (Malaysia, 2022). These incentives increase the customer's interest and ability to motivate them to install an e-wallet application. However, their acceptance is still ambiguous. Are they willing to use an e-wallet when the e-cash credit is fully used?

The objective of this study is to identify customers' perception of e-wallets usage in Selangor. In achieving this objective researcher adopts the TAM model. TAM is a model that is considered the most appropriate for explaining user behavior and how users accept a new system (Shairil Izwan Taasim and Hasnah Ali, 2013). Payment management through the conventional method has now been replaced through innovations developed by payment collection agencies, especially banks by introducing electronic payment e-wallet as an online payment counter. Therefore by adopting this model, two research questions had been developed:

RQ 1: What is the customer's level of acceptance of the use of e-wallets?

RQ 2: What is the relationship between perceived ease of use and perceived usefulness with consumer's attitude?

Figure 1: Research Framework



LITERATURE REVIEW

E-Wallet

A digital wallet or electronic wallet is a financial transaction application that runs on mobile devices. It securely stores your payment information and passwords. These applications allow customers to pay when they go shopping by using their devices (Kagan, 2022). Daniel (1999) defines an e-wallet as a new automated deliverer of traditional banking products and services directly to consumers via electronics to create a more interactive communication network. E-wallets use a mobile device's wireless capabilities like Bluetooth, wifi, and magnetic signals to transmit payment data securely from your device to a point of sale designed to read the data and connect via these signals (Kagan, 2022).

Development of E-Wallet Usage

Financial technology is increasingly gaining consumer attention and choice today, driven by the offering and provision of various digital services and platforms. These include online-banking services, contactless electronic payments as well as electronic calls (e-hailing), and electronic wallets (e-wallets) in the market. Technological payment modes are also increasingly accepted among retailers and financial institutions thus leading to a cashless society (Sobrey, 2018).

The E-Wallet Trends In Malaysia are moving at an even faster pace because of the reduction of cash usage experienced during the covid pandemic. Seeing the increasing demand for digital payment solutions in Malaysia, more and more digital wallet providers are now offering innovative solutions in the market (Trotman, 2021). However, Nuwagaba, 2014 claimed that a cashless society is most difficult to achieve if a country does not have a reliable communication network, along with the problem of citizens who dislike electronic transactions. This is supported by Tee, 2016 that compromise of personal information can undermine consumer confidence to make payments electronically. "The risk of identity theft is very high as consumers have not yet been able to fully adapt to digital transactions, even those who are highly educated also face the risk of falling into the trap of cyber fraud and hacking. Therefore, the level of acceptance is still average.

Technology Acceptance Model

The main purpose of TAM is to explain the determination of computer acceptance in general and to provide an explanation of user behavior or attitudes in a population. TAM states that the intention of behavior to be used is determined by two beliefs i.e., perceived usefulness is meant as the extent to which one is confident that the system will improve something. Second, perceived ease of use which means the extent to which a person is confident that the use of the system is easy or convenient (Marikyan, 2021). TAM also states that there are various influences such as (character, system, developmental process, and training) on the intention to use meant by perceived usefulness and perceived ease of use. The concept of TAM has also stated that perceived usefulness is influenced by perceived ease of use. There is a study conducted on e-payment acceptance based on TAM theory conducted to assess the integration of technology into organizations and analyze the causes of technology acceptance and rejection. This study has found that the level of acceptance of e-payment is high but acceptance of replacing it as a virtual counter is at a minimum level. These findings are important and can be used as a reference in the financial management of consumers more systematically and in turn able to make consumers wise in financial management (Shairil Izwan Taasim and Hasnah Ali, 2013).

METHODOLOGY

This study used convenience sampling where the respondent is focused on 200 customers in Selangor. However, due to time constraints in getting the data, only 150 respondents respond. The collection of the data is through a google form. Data of this study had been analysed using SPSS software.

ANALYSIS

Demographic

The demographic profile of the respondents shows that 51.3% of the respondents are female whereas 48.7% are male. The majority of the respondent is 24 to 28 years old (48.7%) and 62.7% are single. In terms of employment, 36% are from the private sector, 26% are self-employed, 22% are students, 14% are from the government sector, and 2% are housewives. The majority of the respondent received an income of more than RM3,000. For the location, 19.3% from Hulu Langat, 14.7% from Petaling, 13.3% from Gombak, 12.7 % from Sepang and Klang, 10% from Kuala Langat, 7.3% from Hulu Selangor, 6.7% from Sabak Bernam and 3.3% from Kuala Selangor. Out of 150 respondents, 84% are Malays, 8.7% are Chinese and 7.3% are Indian.

Reliability Test

This study conducted a reliability test and measure the result based on the following table:

Table 1: Interpretation of Reliability Test Scores

Value (α)	Interpretation
0.0 – 0.2	Very Weak
0.21 – 0.4	Weak, Low
0.41 – 0.7	Average
0.71 – 0.9	Strong, High
0.91 – 1.0	Very Strong, Very High

Source: (Najib, 2003)

Table 2: Reliability Values

Alpha Cronbach's	Items	Alpha Cronbach Value
Actual use of e-wallet	7	0.716
Attitude towards e-wallet usage	5	0.790
Perceived Ease of Use	5	0.714
Perceived Usefulness	5	0.779

The data show that the alpha value for each variable in this study achieved more than 0.7 which is high and strong.

RQ 1: What is the customer's level of acceptance of the use of e-wallets?

To achieve this objective, an analysis of the mean had been conducted. The result has been measured by referring to the following table:

Table 3: Interpretation of mean score

Mean	Level
1.00 – 2.33	Weak
2.34 – 3.67	Average
3.68 – 5.00	High

Source: (Azizi Yahaya et al., 2006)

Table 4: Total Mean Scores for customer's level of acceptance of an e-wallet

Item	Mean Score	Level
Perceived ease of Use	4.95	High
Perceived Usefulness	4.15	High
Attitude towards using e-wallets	4.02	High
Actual Use of e-wallets	3.95	High
Total Mean Scores	**4.26**	**High**

Scores in Table 4, show a high level of customer's perception of ease of use, usefulness, attitude towards using e-wallets, and actual use of e-wallets. A statement that scores the highest mean in customers' perceived ease of use is *"I think cashless transactions make my shopping experience more interesting"* (mean:4.20, s.d:0.769). For perceived usefulness, the highest mean score is *"E-wallet is useful for customers to make payment in their purchase transactions"* (mean:4.39, s.d:0.703). In terms of customers' attitudes toward using an e-wallet, the statement *"I like to make purchases if offered various cashless payment methods"* scores the highest mean 4.21, s.d:0.710. For actual use, the highest mean score is 4.37 with a standard deviation of 0.902 for the statement *"I fully support the implementation of this system in all trading activities in Selangor"*. This finding shows that the customer's level of acceptance of an e-wallet is high.

RQ 2: What is the relationship between perceived ease of use and perceived usefulness with consumer's attitude?

To achieve this second objective, Pearson correlation analysis was used to measure the strength of the relationship between the dependent and independent variables. The measurement of the strength of the relationship is based on Table 5:

Table 5: Interpretation of correlation analysis scores

Correlation Value	Relationship
0.70 and above	Very strong
0.50 – 0.69	Strong
0.30 – 0.49	Moderate
0.10 – 0.29	Weak
-0.01-0.09	Very Weak

Source: (Azizi Yahaya et al., 2006)

Table 6: Correlation Analysis

	Actual Use	Consumer's Attitude	Perceived Ease of Use	Perceived Usefulness
Actual Use	1	.467**	.595**	.571**
Consumer's Attitude	.467**	1	.660**	.604**
Perceived Ease of Use	.595**	.660**	1	.734**
Perceived Usefulness	.571**	.604**	.734**	1

Table 6 shows the relationship between customers' perceived ease of use and perceived usefulness with consumer's attitude toward e-wallets is significant r = 0.660 and 0.604 with p< 0.01 respectively. Consumers will give a positive attitude toward e-wallets when they believe that the e-wallet is easy to use and very useful to them. The findings show that perceived ease of use and perceived usefulness has a strong relationship with consumers' attitude.

The relationship between consumers' attitudes with actual use also shows a significant relationship with r = .467, p <0.01. However, the strength of their relationship is moderate.

DISCUSSION AND CONCLUSION

Based on the findings, the level of acceptance of the use of E-Wallet is high. This finding is in line with previous research data obtained by Rahayu, 2015, where in her study she found that the e-wallet users are very keen on innovations and new technology. The consumer also is aware of the new e-payment method and they are now accepting the usage of this e-payment method as they found it makes their life easy. As the government provides incentives in the form of e-wallet, the is not impossible for e-wallet becomes a new trend among the young generations and slowly accepted by the other generation. Data from Oppotus, 2021 shows the average age of users of e-wallets in Malaysia is 35 years old and 74% of the users are for groceries items which mini market recorded high usage compared to the supermarket (Oppotus, 2021).

In conclusion, the factors which motivate customers whether to accept e-wallet usage in their payments depend on ease of use and customers' perceived usefulness. If the customer's found that an e-wallet is not useful to them, then they will not use it in their daily transactions. This happens for the Touch n Go e-wallet when they introduce the apps, but that e-wallet could not reload customers' physical toll cards. If the balance on the card is low, customers need to go to the Touch n Go kiosk to reload. That is the reason why customer's feel refuses to use the apps. However, the situation changed when PLUS introduce RFID in their toll. With RFID, customers can cross the toll without touching their cards, and RFID uses an e-wallet. Customers need to make sure their e-wallet balance is not low as RM10.00 if they want to use RFID in crossing the toll. These findings also show the consumer's attitude towards e-wallets where nowadays customers are more aware of technology and slowly accept it and if they have a positive attitude towards it, they will use it and accept the new trend in their daily transactions.

REFERENCES

(MOF), M. o. (2021). *Program Belia*. Retrieved from Belanjawan 2021: https://belanjawan2021.treasury.gov.my/manfaat/index.php/bm/ebelia

Anonymous. (2020, Julai 31). *Rakyat boleh tuntut insentif RM50 dengan Touch 'n Go eWallet*. Retrieved from Sinar Harian: https://www.sinarharian.com.my/article/94756/BERITA/Nasional/Rakyat-boleh-tuntut-insentif-RM50-dengan-Touch-n-Go-eWallet

Azizi Yahaya, Shahrin Hashim, Jamaluddin Ramli, Yusof Boon, & Abdul Rahim Hamdan. (2006). *Teori, Analisis dan Interpretasi Data.* Kuala Lumpur: PTS Professional.

Bacchi, U. (2017, June 21). *U.N. Glimpses into Blockchain Future with Eye Scan Payments for Refugees*. Retrieved from REUTERS: https://www.reuters.com/article/us-un-refugees-blockchain-idUSKBN19C0BB

Kagan, J. (2022, April 10). *Digital Wallet*. Retrieved from Investopedia: https://www.investopedia.com/terms/d/digital-wallet.asp

Malaysia, K. K. (2022). *ePemula*. Retrieved from Bajet 2022: https://budget.mof.gov.my/manfaat/faq/epemula.html

Marikyan, D. &. (2021). *Technology Acceptance Model: A review. In S. Papagiannidis (Ed).* TheoryHub Book. http://open.ncl.ac.uk. Retrieved from Theory Hub Marikyan, D. & Papagiannidis, S. (2021) Technology Acceptance Model: A review. In S. Papagiannidis (Ed), TheoryHub Book. http://open.ncl.ac.uk.

Najib, M. (2003). *Rekabentuk Tinjauan Soal Selidik Pendidikan Johor* . Universiti Teknologi Malaysia.

Nuwagaba. (2014). Reality of Having a Cashless Society in Rwanda: Case Study-National Bank. *International Journal of Business and Management Invention*, 63-69.

Oppotus. (2021, November 24). *Malaysian E-Wallet Usage 2021*. Retrieved from Oppotus.com: https://www.oppotus.com/malaysian-e-wallet-usage-2021-infographic/#:~:text=E%2DWallet%20Usage%20Trends%20in%20Malaysia%20%E2%80%93%202021&text=With%20businesses%20across%20all%20sectors,time%2Dhigh%20of%2067%25.

Rahayu, I. S. (2015). Minat Nasabah Menggunakan Mobile Banking dengan Menggunakan Kerangka Technology Acceptance Model (TAM). Jurnal Ekonomi Syariah Indonesia, 146

Shairil Izwan Taasim and Hasnah Ali. (2013). Penerimaan Pengguna Terhadap Kaedah Pembayaran Elektronik. *Jurnal Ekonomi Malaysia*, 3-12.

Sobrey, J. A. (2018, Julai 14). Gelombang Sistem Bayaran Tanpa Tunai. *Kosmo Online Jurnal* . Retrieved from https://en.wikipedia.org/wiki/Cashless_society

Trotman, J. (2021, February 5). *What Are The E-Wallet Trends In Malaysia?* Retrieved from Nimmble App Genie: https://www.nimbleappgenie.com/blogs/what-are-the-e-wallet-trends-in-malaysia/#:~:text=The%20e%2Dwallet%20was%20launched,top%2Dup%20their%20prepaid%20phones.