

E-Wallet Acceptance Among Public Servants in Bangi, Selangor

Ayu Kamareenna Abdullah Thani

Universiti Teknologi MARA Cawangan Kelantan

Email: ayukamareenna@uitm.edu.my

Siti Rosnita Sakarji

Universiti Teknologi MARA Cawangan Kelantan

Email: rosnita507@uitm.edu.my

Nur Hidayah Rosely

Universiti Teknologi MARA Cawangan Kelantan

Email: nurhidayahrosely@uitm.edu.my

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Abstract

The use of e-Wallet technology via mobile devices is a new digital technology phenomenon in Malaysia's marketplace. Furthermore, the Malaysian government has initiated an e-wallet oriented innovation underneath the Malaysia Budget 2020, notably "e-Tunai Rakyat" programme with the eventual goal for the country to prefer for online wallets. According to previous study, a success of a new technological innovation, such as an e-wallet, is heavily dependent on user adoption of this new technology. As a result, the purpose of this study is to determine the critical elements that impact the intention of using an e-wallet among Malaysian public servants in Bangi, Selangor. The study is based on quantitative, with 136 public servants responding to a questionnaire. The analysis of data utilised the SPSS. Based on the study's findings, public employees in Malaysia are more likely to accept e-Wallet technology if they have prior experience applying for and using them, as well as if they think that the technological foundation is in place to support their use. It is suggested that a few additional variables be included to look at the intended use of electronic wallets. Different factors including reliability, affordability, and trust are suggested to be employed further in the study on behavioural intention to use electronic wallets. Therefore, in the future, it may be possible to study the behavioural intention to use an e-wallet using the same approach but in a different setting.

Keywords: Perceived Ease Of Use, Perceived Usefulness, Intention To Use.

Introduction

People's lives have been made simpler by the internet in today's globe. Considering the increasing trend in Asia-Pacific's smart phone markets, Malaysia's smart phone market is predicted to develop at a stable one percent each year. According to Abdullah et al. (2020), the country has around 14.5 million smart phone users. In 2020, this figure is expected to reach more than 20 million. The number of smart phone applications is growing all the time. Users may now utilise their smart phones to conduct quick financial or digital transactions using a variety of smart phone applications, mainly e-Wallets. e-Wallet (also known as mobile wallet) is a type of electronic wallet. The term "eWallet," or "digital wallet," alludes to something like an online prepaid technology that is used to store money and conduct online transactions using a smartphone, or "digital transaction." Smart gadgets are used to make payments. Electronic wallets (e-wallets), which are an important feature of electronic payment systems, are one of the finest inventions of the twenty-first century. The word "e-wallet" refers to a type of digital wallet that allows a person to link their debit or credit cards to the digital wallet to conduct any transactions (Ngah et al., 2021). Aside from debit or credit cards, electronic cards allow customers to keep their physical card information and bank account number to make certain payment actions (Muhammad Faizal et al., 2022).

The payments made via an e-wallet are more convenient and faster than traditional banking systems since they save time and money (Alam et al., 2021). Electronic payments using an e-wallet not only simplify the financial transaction procedure, and they also promote the benefits of a digital payments, such like ease of making financial transactions, simplicity, and expense tracking (Teoh et al., 2020). The cellular-based payment system is commonly utilised for transactions, and payments are made via mobile applications since consumers find this approach to be advantageous (Puasa et al., 2021). Payment through ewallet not only provides convenience and speed, but also provides customers with a sense of confidence and security in transactions conducted anywhere and at any time (Abdul Halim et al., 2021). The usage of an e-wallet allows for small-scale transactions that are simple to carry out (Karim, et al., 2020).

The fast growth of information technology aids by giving different payment system characteristics. Consumers are migrating from cash-based to cashless due to the rising number of e-payment systems, but changing to a non-cash economy is challenging, and old cash-based business habits are still firmly compacted. The expansion of e-wallets in Malaysia is mostly owing to a few factors, one of which is the ease of cash transactions, followed by security and cost savings. Malaysia has around 42 legally licenced e-wallets, six of which are the most popular and frequently utilised, notably AEON Wallet, Boost, BigPay, GrabPay, WeChat Pay, and Touch'n Go eWallet. These e-wallets play a significant part in moving the country toward a cashless future. Furthermore, Malaysia's government has launched a "e-Tunai Rakyat Program" as part of its Budget 2020 strategy (Ismail, 2021). The project tries to persuade Malaysians to use digital payments instead of cash for a safer, more efficient transaction. The government has set aside RM450 million for this scheme, which would provide 15 million Malaysians with a one-time RM30 digital incentive that may be spent at any affiliated shop (Ismail, 2021).

However, the mobile wallet technology in Malaysia is it is still in the infant stage. Malaysia's populations were unable to successfully embrace e-wallets for several reasons. The key issues are security and confidentiality. Online transactions expose customers to security threats including hacking, malware, and phishing attempts. Other than security concerns, internet accessibility may cause users' interest in utilizing e-wallets to decline

(Ramli & Hamzah, 2021). If the acceptability of the new technology idea of the e-wallet is poor, particularly customers, the new technology notion may flop. According to the United Nations Statistics Division, 65.4% of Malaysian consumers between the ages of 15 and 64 continue to use physical currency. Malaysia lags significantly behind nations like China and India in terms of mobile payment development, which is fuelled by a high degree of mobile wallet use (Ying & Mohamed, 2020). Given that most Malaysian users neglect the fact that e-wallets serve numerous benefits and have little understanding of how to use e-wallets, therefore it remarks the adoption of e-wallet services is low. According to a market study, Malaysian customers prefer debit cards or online banking to e-wallets when making non-cash payments (Omarini, 2018). In other study conducted by PwC Research & Analysis Malaysia (2018), the limited merchant and customer acceptance, security threats, and poor user experience are the main issues posed by the usage of e-wallets. According to a poll, Malaysia still lags behind other regional competitors including China, India, and Singapore because of its poor adoption rate (Andrew & Tan, 2019).

Contrarily, smartphone-based cashless payments have already become common in other developing nations, including Thailand, Vietnam, and Indonesia. According to the Global Consumer Insight Survey 2019, Thailand has a client base of 67%, or a 19% growth, who have previously made a mobile payment. Vietnam and the Middle East have seen 24% and 20% growth, respectively (Aji et al., 2020).

Therefore, by examining the driving forces behind why consumers are compelled to use e-wallet application, the developers and service providers will construct plans and business strategies to persuade potential adopters to use e-wallets. This will let marketers create a wearable e-wallet that is more effective and has pricing benefits like coupons or others offer that might attract them. It will also greatly improve consumers' intentions to use e-wallets going forward.

Due to a lack of study on this topic, the present study contributes to the literature by examining the effect of perceived usefulness and perceived ease of use on customers intention to use e-wallet. To give more fruitful insight, another major contribution of this study is investigating the intention to use e-wallet among the public servants in Malaysia by using the Technology Acceptance Model (TAM Model). As a result, two research objectives have been established:

1. To determine the factors that impact public servants' intentions to use an e-wallet in Malaysia.
2. To determine the correlation between significant factors influencing e-wallet usage and the degree of e-wallet usage among Malaysian public servants.

2.0 Literature Review

The technology acceptance model (TAM) is a widely used theoretical framework for researching customer acceptability of new technologies. Fred Davis developed the model in 1989, based on the Theory of Reasoned Action (TRA) and adapted specifically for gauging user acceptance information systems (Ying & Mohamed, 2020). TAM is an information system model that examines how people come to embrace and use technology.

According to Davis (1989), the technology acceptance model provides a core idea of the connection amongst external variables that impact perceived usefulness, perceived ease of use, and, as a result, technology adoption. TAM proposes two key behavioural cognitive beliefs, perceived usefulness, and perceived ease of use (Puasa et al., 2021). The TAM model

was used to establish the conceptual framework for this study. Social Influence, Perceived Enjoyment, and Information & Knowledge are the three variables that make up the "Perceived Usefulness" factors used in this study. Previous Experience and Facilitating Conditions make up the "perceived ease of use" aspects.

The selection of factors is concerned with finding proposed of past academic studies (Alam et al., 2021; Nizam et al., 2018). In contrast, the acceptability of technology in this study is measured using the "Intention to use" measure, which is based on the findings of David (1989), Ying and Mohamed (2020), and Sabli et al. (2021), who found that behavioural intention to use is the most closely related antecedent to user action.

2.1 Factors That Influence the Intention of Using E-Wallet

2.1.1 Intention to use

The consumer's intention to use a new product in the market effectively is referred to as "intention to use" (Edeh et al., 2021). The TAM model considers a consumer's attitude to be the most important factor in determining whether they will utilise something. According to Fishbein and Ajzen (1975), attitude is a multidimensional construct that has three dimensions: cognitive (experiences, beliefs, and views), affective or emotional (feelings, emotions, and subjective assessments), and behavioural (intention to purchase, respect to purchase and response to rejection).

2.1.2. Perceived usefulness

The degree to which customers feel that adopting the latest product or system will assist users accomplish their tasks or obligations more effectively is referred to as perceived usefulness (Davis, 1989). Prior studies (Chan et al, 2020; Edeh et al., 2021) found that the key perceived usefulness determinants or factors that affect intention to use include social influence, perceived enjoyment, and information and knowledge.

2.1.3. Social influence

Social impact, in the perspective of public servants' consumers, mostly describes the impact and enthusiasm derived from their colleagues' perspectives. As a result, social influence is seen as the primary driver of public servant as customers' adoption of new technologies, such as e-wallets. Two essential fundamental categories of elements make up the social construct. First is the consumer's belief in their peer, whom they see as an influence, and the second is the consumer's incentive to act in accordance with the aspirations of the persons of reference (Bee & Ying, 2021).

2.1.4. Perceived enjoyment

Perceived enjoyment indicates intrinsic motivation, that is defined as "doing something because it is intrinsically intriguing or pleasurable" (Chew et al. 2021). Intrinsic motivation, according to Venkatesh (2015), is a crucial element determining behavioural intention to adopt new technology. Findings from Venkatesh (2015) confirm the prior concept that customers accepted latest technology due to the obvious fun and benefits that come with it (Nizam et al, 2018). Furthermore, a previous study found that perceived enjoyment is strongly linked to the intention to use (Andrew & Tan, 2020).

2.1.5. Information and knowledge

Information is data which has been provided by a relational relationship, whereas knowledge is the predictable process to determine patterns within a set of data (Alam et. al, 2021). Information on new technologies should be communicated to consumers in a succinct and straightforward manner to foster better perception about the technology's perceived usefulness.

2.1.6. Perceived ease of use

The degree to which a person feels that utilising a certain new technology or system would be effortless is characterised as perceived ease of use (Abdullah et al., 2020). As a result, perceived ease of use reflects consumers' beliefs about how a new technology or system arose to influence the way they act and experience. As a result, earlier research has identified two common characteristics in relation to perceived ease of use, which seem to be consumers' "previous experience" and the "facilitating situation" of the new technology.

2.1.7. Previous experience

Economists often claim that youthful consumers are the key users and benefactors of new technology relying on classic human capital concepts. However, research has shown that technical growth is typically skewed toward competence (Seng & Hee, 2021). Because human capital grows with experience, the skill-biasedness of technological development would favour more experienced employees. As a result, the effects of new technology on distinct experience groups of customers will be determined by the interaction of skill-bias and historical impacts.

2.1.8. Facilitating conditions

The degree to which an individual feels that a technological infrastructure exists to enable the usage of technology is characterised as facilitating circumstances (Venkatesh, 2015). Taylor and Todd (1995) discovered that enabling situations had a direct impact on behavioural intention. People are predicted to be more willing to adopt new technology or services when adequate enabling conditions (for example, an internet-enabled smart phone; knowledge of how to use mobile wallet services; vendor acceptance of mobile wallet services, and so on) exist.

2.2 Research Framework

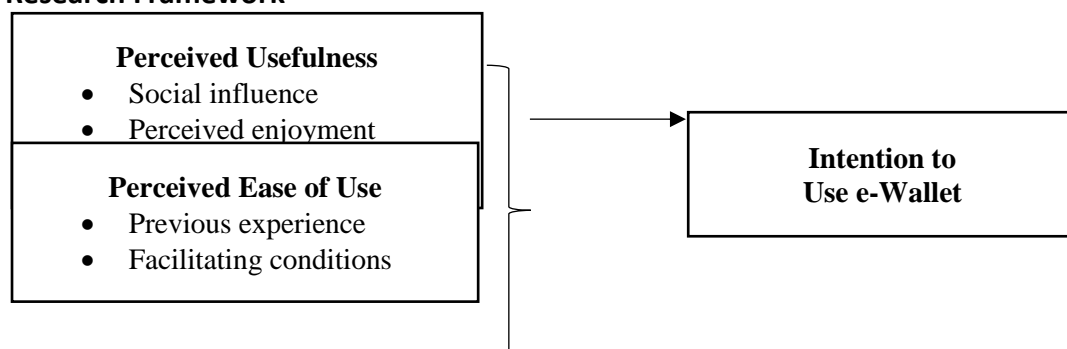


Figure 1: Factors that influences the intention of using e-Wallet

2.3 Research Hypotheses

H1: Social influence is positively related to the intention to use an a mobile wallet or an e-wallet among Malaysian public servants.

H2: Perceived enjoyment is positively connected to the intention of utilising a mobile wallet or an e-wallet among Malaysian public servants.

H3: Information and knowledge are highly related to the intention of utilising a mobile wallet or an e-wallet among Malaysian public servants.

H4: Previous experience is positively related to the intention of using a mobile wallet or an e-wallet among Malaysian public servants.

H5: The facilitating condition is positively related to the intention of using a mobile wallet or an e-wallet among Malaysian public servants.

3.0 Research Methodology

This study utilized a quantitative technique in the form of a questionnaire. The questionnaire was created to analyse the main variables that determine the intention of using an e-Wallet as well as the degree of intention to use an e-Wallet among Malaysian public servants. The respondents were asked to score each factor's characteristic and intention degree on a five-point scale ranging from (1) strongly disagree to (5) strongly agree.

The study population consists of public servants in government training agency located in Bangi. The sample size is calculated using the Krejcie and Morgan Table. By offering a table that provides a solid sample size decision model, Krejcie and Morgan (1970) substantially simplified sample size decision. This table serves as a broad scientific guideline for determining sample size. Based on the table created by Krejcie and Morgan (1970) for a population of 210 staffs, a sample size of 136 is recommended. The data were keyed in by using the Statistical Package for Social Science (SPSS) Version 26.0.

4.0 Analysis and Discussion

The total number of responded questionnaires is 136 which contributed to the respond rate is 100%. Every questionnaire has been checked, and there are no missing values among the 136 returned surveys.

Table 1

Respond Rate

Number questionnaires distributed	Number questionnaires returned	Percentage returned (%)	Number of valid questionnaires	Percentage valid (%)
136	136	100	136	100.0

Table 2

Demographic Profile of Respondents

Variable	Descriptive	Frequency
Gender	Male	61
	Female	75
Age	<30 years old	29
	30-35 years old	39
	36-40 years old	37
	41-45 years old	16
	46-50 years old	8
	>50 years old	7

Table 3
Reliability Analysis for Factors influences the intention of using e-Wallet

Variables	Cronbach's Alpha
Facilitating condition	0.855
Previous Experience	0.788
Perceived Enjoyment	0.830
Social Influence	0.694
Information and Knowledge	0.723

As presented in Table 3 above, the Cronbach's Alpha values for independent variables are in the range of .694 to .855. The figures indicate that the measures had acceptable and good values of Cronbach's Alpha. The minimal acceptable dependability, according to Nunnally (1978), is .60. According to Bougie and Sekaran (2019), the test is more trustworthy if the result is near to 1.0. Reliability below .60 is regarded bad, those between .70 and .80 are fair, and those above .80 are excellent (Bougie & Sekaran, 2019).

Table 4
Results of Regression Analysis with Intention to Use as the Dependent Variable

Variables	Standardized Values	Beta
Social influence	.417**	
Perceived enjoyment	.293*	
Information and knowledge	.313**	
Previous experience	.291**	
Facilitating conditions	.342**	
R	.385	
R squared	.148	
F values	6.252	
Significant F values	.003	
Durbin Watson	2.134	

From table above it shows that R squared value is 14.8%, indicating that 14.8% of the variance in the regression model has been explained by the independent variables. The significance F value (F= 6.252, p = 0.003) indicates model fit and the Durbin Watson value 2.134 and still within the acceptance range. Looking at the individual contribution of independent variables in explaining intention to use as the dependent variable, all variables found to be a significant predictor. Therefore, all the hypothesis is supported.

As a result, the study's findings suggest that e-wallet adoption among Malaysia public servants is strongly linked to the previous experiences of public staffs with e-Wallet application and use, and the extent to which the employees believes that the technological infrastructure is built to sustain the use of e-wallet technology. The Malaysian government, as well as e-wallet service providers, must therefore continuously update and broaden the nation's digital infrastructure, which includes the platform or system for e-Wallet; the application or e-Wallet software, in an effort to increase e-wallet acceptance among Malaysian public servants and to ensure that they continue to use e-Wallet after the e-Tunai Rakyat project.

5.0 Conclusion

Adding an e-wallet payment method to a local firm's or entrepreneur's infrastructure is a terrific idea since it gives a straightforward solution for commercial transactions. As a result, the Malaysian government has embarked to encourage Malaysians to use digital payments by launching the e-Tunai Rakyat programme. This study describes a systematic strategy to evaluating the significant elements that impact e-wallet adoption and intention to use by Malaysian government employees from a public training agency. According to the findings of the study, the key to increasing Malaysia's e-wallet adoption and growth is to have a well-established digital infrastructure that is constantly upgraded and expanded. It is also proposed that a few more variables be included to investigate the usage purpose of electronic wallets. In the study on behavioural intention to use electronic wallet, distinct elements such as trust, cost, and dependability are proposed to be used further. So, in the future, the same principle but a different context may be used to research the behavioural intention to use e-wallet.

References

- Abdullah, N., Redzuan, F., & Daud, N. A. (2020). E-wallet: Factors influencing user acceptance towards cashless society in Malaysia among public universities. *Indonesian Journal of Electrical Engineering and Computer Science*, 20(1), 67-74.
- Abdul-Halim, N. A., Vafaei-Zadeh, A., Hanifah, H., Teoh, A. P., & Nawaser, K. (2021). Understanding the determinants of e-wallet continuance usage intention in Malaysia. *Quality & Quantity*, 1-27.
- Aji, H. M., Berakon, I., & Md Husin, M. (2020). COVID-19 and e-wallet usage intention: A multigroup analysis between Indonesia and Malaysia. *Cogent Business & Management*, 7(1), 1804181.
- Alam, M. M., Awawdeh, A. E., & Muhamad, A. I. B. (2021). Using e-wallet for business process development: challenges and prospects in Malaysia. *Business Process Management Journal*.
- Andrew, J. V., & Tan, K. E. (2020). A Model of Factors Influencing Consumers Intention to Use e-Wallet System in Malaysia: A Systematic Review. *Malaysian Journal of Business and Economics (MJBE)*, 53-53
- Bee, T. S., & Ying, K. Y. (2021). An examination of determinants for e-wallet adoption in Malaysia: a combined approach. *F1000Research*, 10(1155), 1155.
- Bougie, R., & Sekaran, U. (2019). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Chan, K. L., Leong, C. M., & Yiong, B. L. C. (2020). Sharing Economy through E-Wallet: Understanding the Determinants of User Intention in Malaysia. *Journal of Marketing Advances and Practices*, 2(2), 1-18.
- Chew, J. W., Parveen Kaur, A. S., Siew, X. Y., Tan, H. Y., & Tan, Y. Z. (2021). *Factors influencing the intention to use digital wallets in Malaysia* (Doctoral dissertation, UTAR).
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease Of Use, And User Acceptance Of Information Technology. *MIS Quarterly* 13 (3): 319–340, Doi:10.2307/249008
- Edeh, F. O., Aryani, D. N., Kee, D. M. H., Samarth, T., Nair, R. K., Tan, Y.

- S., & Teh, Y. C. (2021). Impact of COVID-19 Pandemic on Consumer Behavior towards the Intention to Use E-Wallet in Malaysia. *International Journal of Accounting & Finance in Asia Pasific (IJAFAP)*, 4(3), 42-59.
- Ismail, I. (2021). E-wallet use in Malaysia growing. *New Straits Times Press (M) Bhd.*
- Karim, M. W., Haque, A., Ulfy, M. A., Hossain, M. A., & Anis, M. Z. (2020). Factors influencing the use of E-wallet as a payment method among Malaysian young adults. *Journal of International Business and Management*, 3(2), 1-12.
- Muhammad Faizal S., Wan Saiful 'Azzam, W. I, Hardy, L.R, Nur Amalina, A., Siti Nor Adawiah, H., Norazlan, A. (2022) Use It or Not to Use It? Mobile Wallet Usage Intention Amidst Covid-19 Outbreak among Malaysians. *Malaysian Journal of Consumer and Family Economics*, 29, 209-225.
- Ngah, R., Azizan, N. A., Kadir, M. A. B. A., Thuraisamy, R., Mohamad, Z., & Danila, N. (2021). Exploring antecedents of online purchasing behavioral intention of generation z: An integrated model of four theories. *Malaysian Journal of Consumer and Family Economics*, 27, 1-24.
- Nizam, F., Hwang, H. J., & Valaei, N. (2018, July). Measuring the effectiveness of E-wallet in Malaysia. In *3rd IEEE/ACIS International Conference on Big Data, Cloud Computing, and Data Science Engineering* (pp. 59-69). Springer, Cham.
- Omarini, A. E. (2018). Fintech and the future of the payment landscape: The mobile wallet ecosystem - A challenge for retail banks? *International Journal of Financial Research*, 9(4), 97-116.
- Puasa, S., Tan, J., Gazali, H. M., & Ayub, N. (2021). Consumers' behavioural Intention To Use E-Wallet During The Pandemic Of Covid-19: Applying The Unified Theory Of Acceptance And Use Of Technology (Utaut). *Labuan Bulletin of International Business and Finance (LBIBF)*, 64-78.
- Ramli, F. A. A., & Hamzah, M. I. (2021). Mobile payment and e-wallet adoption in emerging economies: A systematic literature review. *Journal of Emerging Economies and Islamic Research*, 9(2), 1-39.
- Sabli, N., Pforditen, N. E., Supian, K., Azmi, F. N., & Solihin, N. A. I. M. (2021). The Acceptance of E-Wallet in Malaysia. *Selangor Business Review*, 1-14.
- Seng, W. Q., & Hee, O. C. (2021). Factors Influencing the Intention to Use E-Wallet: An Extended Hedonic-Motivation System Adoption Model.
- Sunny, P., & George, A. (2018). Determinants of Behavioral Intention To Use Mobile Wallets--a Conceptual Model. *Journal of Management (JOM)*, 5(5), 52-62.
- Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. *Information systems research*, 6(2), 144-176.
- Teoh Teng Tenk, M., Yew, H. C., & Heang, L. T. (2020). E-wallet Adoption: A case in Malaysia. *International Journal of Research In Commerce and Management Studies (ISSN: 2582-2292)*, 2(2), 216-233.
- Venkatesh, V. (2015). Technology acceptance model and the unified theory of acceptance and use of technology. *Wiley Encyclopedia of Management*, 1-9.
- Ying, W. C., & Mohamed, M. I. K. P. (2020). Understanding the factors influences users continuous intention towards e-wallet in Malaysia: Identifying the gap. *Research in Management of Technology and Business*, 1(1), 312-325.