

Perception on E-Wallet Application among Night Market Consumer in Lembah Klang

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ABSTRACT

The COVID-19 pandemic has led to an increased reliance on online transactions in Malaysia, with E-wallet and Apple Pay being the preferred methods of payment for consumers. These digital payment options offer convenience and eliminate the need to withdraw physical cash. The surge in E-wallet usage is driven by attractive incentives like government aid programs, cash back offers, discounts, and loyalty points. However, despite the introduction of E-wallets in 2017, their adoption remains limited due to a lack of awareness among consumers and businesses. Therefore, this research explores perception on acceptance of E-wallet as payment option among consumers specifically focusing on their impact on consumer behavior at night markets. This quantitative study used multiple regressions on a sample of 393 respondents. The key findings indicate that "Appearance Easy to Use", "Security Perception", "Function Perception" and "Attitude" have a significant relationship on the perception of E-wallet application among night market consumer in Lembah Klang. E-wallets have the potential to transform the night market experience by providing convenience and reducing the need for cash withdrawals at ATMs. As Malaysia's population continues to grow, the government's push for mobile payments is expected to drive the widespread adoption of digital transactions in the country.

1. Introduction

In Malaysia, E-wallets have been very common over the past few years. The usage of E-wallets has grown in prominence in Malaysia during the Covid-19 pandemic [1]. The term "E-wallet" refers to an electronic wallet, also known as a digital wallet that enables users to store money, manage it, and conduct transactions online using a computer or a mobile device [1]. E-wallet allows users to make payments quickly and easily without the need for actual currency or credit cards by providing convenience, security, and ease of use.

In order to help Malaysians during the COVID-19 pandemic, the Malaysian government periodically offers stimulus packages. These bundles under the "PRIHATIN" programme have

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contributed to the increased usage of E-wallet in Malaysia [2]. These include cash back offers, discounts, and loyalty points. Growing contactless and cashless payment trends E-wallet, particularly among millennial and Gen X have helped the issue of touching when making payments especially during the pandemic. However, there are still a limited number of adoptions on E-wallet among consumers and companies. According to a report issued by the Department of Statistics Malaysia [3], a total of 47,556 establishments conducted E-commerce transactions out of 920,624 establishments. This shows that the use of online payments is still low in Malaysia. According to Malaysia's trend, the market is still in its early stages [4]. Consequently, there is a good phenomenon around the mobile payments sector. This is due to the fact that Malaysians frequently use E-wallet to complete their purchases and that it could spread into Mamak stands and night market is necessary but that there are serious concerns about the security of these techniques. Additionally, since the entire transaction procedure is carried out online, consumers may lower their chance of losing money. As an E-wallet requires a specific authentication before conducting transactions, this may make it impossible for a risk of fraud. Without the user verification, even if the criminal had obtained access to a user's cell phone, they would be unable to withdraw any money [5].

Even though E-wallet comes with many advantages, the use of E-wallet by users is hindered by a number of issues. One of them is that because they are used to traditional transactions involving actual money, customers find it challenging to switch to digital payments. E-wallet also demand that users comprehend how transactions are made, which poses a challenges for older generation who might have difficulties learning and adopt digital technology [1]. The issue of security and confidentiality is another important concern with E-wallet that discourages users from using them. The security of bank accounts or financial resources, as well as the security of personal information if the phone is lost or stolen, are just a few of the issues that give rise to security and confidentiality worries. E-wallet are still a relatively at the early stage, thus they come with new risks including virus, phishing, and hacking [6].

Despite being available in Malaysia for a while, E-wallet is still not widely used [1]. Users are still unaware of the advantages and convenience of utilising E-wallet because there is still a lack of user awareness about them. Therefore, the purpose of this study is to determine the perception of E-wallet user adoption among consumer in Malaysia.

2. Literature Review

E-wallet application provides users with a variety of advantages. E-wallet and their benefits has been the subject of numerous studies in the past. In light of past research, this section will describe the factors that influence E-wallet acceptance.

2.1 Appearance of Easy to Use

Perceived ease of use is the extent to which a person believes that utilising a specific system would be free from effort [7]. According to Razif *et al.* [8], there is a bad correlation between perceived usability and behavioural outcomes of E-wallet usage intent. According to Sathish *et al.* [9], if the layout is appealing, clients will be more lured to the e-payment programme. Customers are more likely to utilise an E-wallet if the application is simple to use and comprehend.

The perceived ease of use plays a key role when utilising a complicated system [10]. Parego and Molteni [11], conducted their study in Malaysia and found that customers' perceptions of ease of use there have a favourable impact on consumer behaviour. The simplicity of use of a programme

could be used to gauge users' adoption that use with a specific device. Su *et al.*, [12] find that customers' attitudes are greatly influenced by how easy they consider using online service technologies to be. Their conclusion is supported by the fact that users of E-wallets realise how convenient it is to use them. They therefore frequently adopt the E-wallet with a favourable mind-set. According to Tabianan *et al.*, [13] the perceived ease of use indicates the consumer's belief on how the new technology or system evolved to affect the consumers' actions and experiences. Thus,

H1: Users' perception on to using E-wallet is favourably influenced by how easy they perceive it to be to use.

2.2 Security Perception

Being safe from harm or danger is the state of being in security. Nandhini and Girija [14] define perceived security as the subjective likelihood that customers believe their private and financial information could be stored, throughout their exchange and storage. A consumer's sense of security will reflect whether they believe a particular technology is used safely or not when executing their transactions [15]. The author also emphasises how crucial consumer perceptions of security are in determining whether they will use mobile payments. He adds that it's critical to build apparent security measures. Customers who view security as being high, for instance, are more likely to utilise E-wallet.

According to Afshan and Sharif, [16], perceived security is determined by how each individual feels about security rather than by objective security criteria. People's perceptions of security would positively impact how likely they are to use mobile payment technologies [17,18]. Tsiakis and Sthephanides, [19] discover that the association between perceived security and the electronic payment system is unfavourable and minimal. The findings of Yousafzai *et al.*, [20] refuted the theory that perceived security influences one's intention to utilise an electronic wallet.

The degree to which customers believe that making a payment could safeguard their online transactions is another definition of perceived security offered by Owee *et al.* [21]. Additionally, they claim that consumers' perceptions of security with regard to their personal information could be safely preserved when people conduct online transactions. It is normal to predict that the attitude towards using E-wallet will be favourable if consumers feel e-payments benefit them and combined with perception on heightened security features [22]. Overall, this research shows that attitudes toward using an E-wallet should be positively influenced by perceived security. This leads to the development of second hypotheses as below:

H2: Users' perception toward utilizing e-payment is positively impacted by how secure they perceive it to be.

2.3 Trust of E-Wallet

Consumer would be encouraged to have goodwill for E-wallet since trust in online transactions clarified that the risk in economic operations was reduced by the supposed risk arising from a confidence [20]. Electronic payment processes take place in the environment of user expectations that support the consumers' confidence [19]. Trust can lead to better outcomes while suspicion can help prevent failures [7,23].

Consumer trust is crucial for security and provides little additional assurance that an online vendor won't engage in any unethical or unwanted behaviour, such as providing inaccurate

information, making unreasonable sales, disclosing personal information, or conducting purchases without the users' prior consent [17]. Without a faith in the system, E-wallet will never become more widely used. As a result, prior research revealed that E-wallet acceptance is influenced by factors other than trust [18]. Hence, the third hypotheses is

H3: Trust among users has a beneficial impact on their perception toward the E-wallet usage.

2.4 Function Perception

The degree to which a person believes a technological advancement will enhance their efficiency or productivity in a specific work is demonstrated by how helpful they view a given technology to be. Such a description relates to the consumer's perception of better outcomes while utilizing E-wallet programmes through mobile devices, laptops, and desktops, increasing the experience of carrying out financial transactions.

The behavioral characteristics of purpose to develop trust are favorably impacted by this impression of the use of E-wallets [18]. According to Afshan and Sharif [16], people will only adapt a particular technology if they feel the need to use it in their regular jobs and they won't embrace it until it makes their jobs better.

H4: Perceived function positively influenced the perception to use the E-wallet.

2.5 Attitude

It's important to have a positive attitude when it comes to studies. The attitude a person has towards engaging in the desired behaviour might be either good or negative. The intention to use an E-wallet may be positively impacted by attitudes [7]. Customers' attitudes regarding the adoption of wallet applications are significantly impacted by incentives or benefits that were offered [8].

The primary factor that directly influences users' satisfaction with and desire to use a mobile wallet is their level of trust regarding the E-wallet [9]. Based on attitude about the function perception, users' expectations for how the E-wallet will help them achieve the goals they have set. A user could think, for instance, that using an E-wallet will make purchasing products and services simpler or that doing so will give them a more secure place to save their financial information.

H5: Users' attitude influenced their perception in using E-wallet.

3. Methodology

The aim of this study is to determine the perception of E-wallet application among night market consumer in Lembah Klang. This study was conducted at night markets around Klang Valley to examine the consumer behavior towards using E-wallet as a transaction option. A total of 393 respondents participated in this study, and the convenience sampling method was used. This study employed quantitative technique as this study distributed close-ended questionnaire to the targeted respondents. Questionnaire consists of 2 parts. The questions in the first section related to respondent's demographic profiles, and the questions in the second section related to perception of e-wallets application. Multiple regression analysis is the analysis technique utilised to meet the

research objective. Regression analysis is a statistical approach used to predict the value of a dependent variable based on the values of two or more independent variables [21-23].

4. Research Framework

The research framework for this study is shown in Figure 1. The framework was adapted from Idris [4]. According to the research framework, independent variables are appearance of easy to use, security perception, trust of E-wallet, function perception and attitude. The perception of E-wallet application among night market consumer in Lembah Klang is the dependent variable.

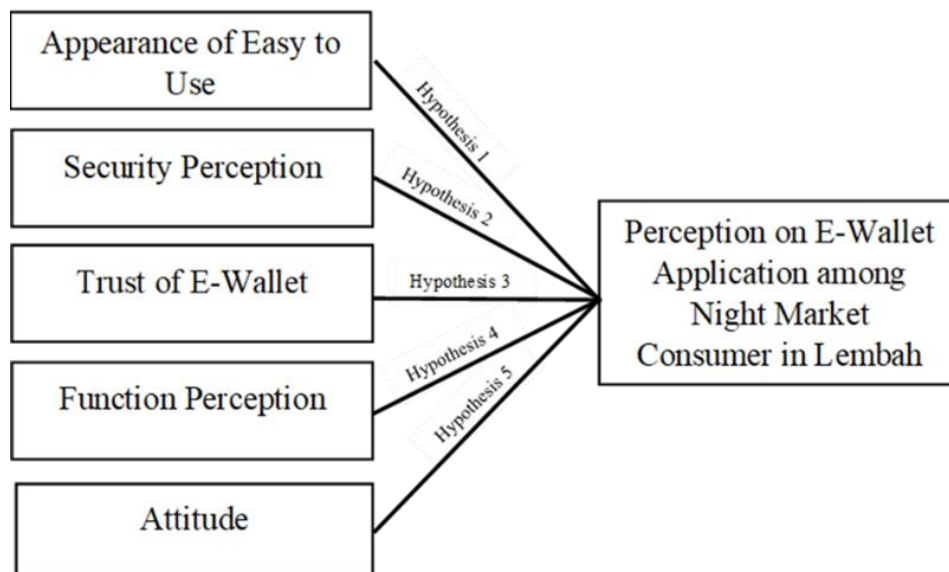


Fig. 1. Research framework [5]

5. Results

5.1 Descriptive Statistics

The demographic profile of the respondents is shown in Table 1. The results show that there are more male respondents than female respondents. 208 (52.9% of the 393 respondents) were men and 185 (47.1%) were women. Based on the results, 176 (44.8%) were married, 2 (0.5%) were divorced, and 2 (15.7%) were single. With 136 respondents, or 34.6%, the majority of the respondents are between the ages of 18 and 25. The results of a question about respondents' educational backgrounds reveal that 259 (65.9%) of the total respondents had a background in higher education, 89 respondents (22.6%) had a background in secondary school, 23 respondents (5.9%) had a background in primary school, and 22 respondents (5.6%) had no formal educational background. Meanwhile, 74% of the respondents reported monthly incomes of RM3000 or less.

Table 1
 Demographic profile of the respondents

Category	Item	Frequency	Percent
Gender	Male	208	52.9
	Female	185	47.1
Marital status	Single	215	54.7
	Married	176	44.8
	Divorced	2	0.5
Age	18 - 25	136	34.6
	26 - 35	105	26.7
	36 - 45	42	10.7
	46 - 55	59	15.0
	56 - 65	26	6.60
	66 - 75	25	6.40
Education level	Higher Education	259	65.9
	Secondary School	89	22.6
	Primary School	23	5.9
	No Formal Education	22	5.6
Monthly income	RM1000 and below	154	39.2
	RM1001 - RM3000	137	34.9
	RM3001 - RM5000	78	18.8
	RM5001 and above	24	6.1

5.2 Reliability Test

The reliability test's objective is to determine whether the survey's questions are relevant to the research that being conducted. A reliability test is a type of smaller-scale research project that can be carried out to help with the design and improvement of a bigger study. A reliability test must be carried out in order to confirm that the scale is free of mistakes. The Cronbach's alpha coefficient test is used by researchers to evaluate the reliability of this study.

Table 2
 Reliability test

Cronbach's Alpha	N of items
0.976	35

The Cronbach's alpha coefficient was computed to evaluate the internal consistency reliability of the questionnaire. Table 2 shows result of reliability test. The Cronbach's alpha value of 0.976 indicates a good internal consistency among the items. The values indicate good internal consistency within each variable, suggesting that the items within each dimension are measuring the intended construct consistently.

5.3 Multiple Regression Analysis on Coefficients

Multiple linear regressions are the appropriate technique to be utilized if the set of independent variables are two or more variable associated with one continuous dependent variable [21-23]. Five constructs of independent variables which consist of appearance of easy to use, security perception, trust of e-wallet, function perception and attitude were analysed concurrently to examine the effect on the perception of E-wallet application among night market consumer in Lembah Klang as the dependent variable.

Table 3 shows the R Square test that measures the relationship between attitude, trust, appearance easy to use, function perception and security perception on the night market consumer perception on e-wallet application. Result shows that R Square test is valued at 0.978 where it shows that 97.80 per cent variance in perception on E-wallet application is accounted by the respondent attitude, trust, appearance of easy to use, function perception and security perception. Hence it can be concluded that dependent variables give a strong significant impact to the independent variable which is attitude, trust, appearance easy to use, function perception and security perception of the E-wallet.

Table 3
 The model summary

Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.989 ^a	0.978	0.978	0.18415	0.978	3465.478	5	387	0.000

a. Predictors: (Constant), Attitude, Trust, Appearance easy to use, Function perception, Security perception

b. Dependent Variable: Perception on e-wallet application

Source: Data from SPSS

Besides that, Table 4 shows correlation coefficient value of each independent variable with the dependent variable. The significant value <0.05 in this analysis indicates a significant relationship. As a summary, Appearance Easy to Use, Security Perception, Function Perception and Attitude have a significant relationship on the perception of E-wallet application among night market consumer in Lembah Klang. The beta and significant value can determine the highest influence for relationship on the independent variables and dependent variable. Based on the result, the beta and significant value of independent variables that have significant relationship with dependent variable are Appearance Easy to Use (0.247, 0.000), Security Perception (0.131, 0.005), Function Perception (0.423, 0.000), and Attitude (0.279, 0.000). Function Perception is the highest significant influence factor for perception of E-wallet application.

The significant value either the variable gives significant impact or not towards the dependent variables. If the $p > 0.05$, it does not give significant impact, but if $p < 0.05$, it does give significant impact. Based on the significant value in the table, appearance easy to use, security perception, function perception and attitude have value below 0.05 which mean these four factors give significant impact. Meanwhile, for the Trust has value above 0.05 which means these factors does not give significant impact.

Table 4
 Multiple regression analysis correlation coefficient result

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
	(Constant)	0.028	0.031			
1	Appearance easy to use	0.251	0.037	0.247	6.729	0.000
	Security perception	0.142	0.050	0.131	2.822	0.005
	Trust	-0.091	0.047	-0.081	-1.918	0.056
	Function perception	0.425	0.039	0.423	10.868	0.000
	Attitude	0.276	0.038	0.279	7.231	0.000

5. Conclusions

The study examines how night market consumers in Lembah Klang perceive e-wallet applications. It reveals important findings that shed light on consumer behavior. Most night market consumers find e-wallet apps easy to use for making payments. The main benefits include convenience, fast transactions, and expense tracking. This shows that more people in this group are accepting and using digital payment options. Next, certain factors influence consumer acceptance of e-wallets, such as security, trust, user-friendliness, attitude, and incentives. By addressing these factors, e-wallet providers can improve the user experience and encourage more consumers to adopt e-wallets at night markets. The study also uncovers obstacles that hinder widespread use of e-wallets, including a preference for cash, concerns about data privacy, and limited acceptance by some night market vendors. Overcoming these challenges is crucial for promoting e-wallet usage in this group.

To address these findings, e-wallet providers should focus on building trust by implementing strong security measures and transparent data handling practices. They should also encourage night market vendors to adopt e-wallets, offering consumers a seamless transaction experience. In conclusion, this study provides insights into how night market consumers in Lembah Klang perceive e-wallets. Understanding these findings can help stakeholders develop strategies to increase acceptance and usage of e-wallet apps in this market segment.

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References

- [1] Yang, Marvello, Abdullah Al Mamun, Muhammad Mohiuddin, Noorshella Che Nawi, and Noor Raihani Zainol. "Cashless transactions: A study on intention and adoption of e-wallets." *Sustainability* 13, no. 2 (2021): 831. <https://doi.org/10.3390/su13020831>
- [2] Hossain, Mohammad Mainul, Salma Akter, and Hamed Mohd Adnan. "Does the trust issue impact the intention to use e-wallet technology among students?." *Journal of Entrepreneurship and Business (JEB)* 10, no. 1 (2022): 57-71. <https://doi.org/10.17687/jeb.v10i1.860>
- [3] Malaysia, Department of Statistics. (2017). Main Findings Usage of ICT By Business And E-commerce 2016.
- [4] IDRIS, JUNAINAH, and MUHAMMAD IZZAT HIDAYATULLAH HAMZAH. "A Study on Consumer's Perception of E-Wallets in Selangor." In *Proceeding of the 9th International Conference on Management and Muamalah*, pp. 29-35. 2022.
- [5] Tai, Tien How, Kenneth Ming Jian Lee, Yong Yi Yap, and Krishnan Moorty Surajvaraman. "Predicting working adults' intention to use e-wallet in Malaysia: a perspective of behavioural belief." PhD diss., UTAR, 2020.
- [6] Chew, Jian Wei, Arjan Singh Parveen Kaur, Xue Yean Siew, Hui Yun Tan, and Yu Zhen Tan. "Factors influencing the intention to use digital wallets in Malaysia." PhD diss., UTAR, 2021.
- [7] Malik, Anshul, S. Suresh, and Swati Sharma. "An empirical study of factors influencing consumers' attitude towards adoption of wallet apps." *International Journal of Management Practice* 12, no. 4 (2019): 426-442. <https://doi.org/10.1504/IJMP.2019.102534>

- [8] Razif, Nurul Nabilah Mohd, Masnita Misiran, Hasimah Sapiri, and Zahayu Md Yusof. "Perceived risk for acceptance of E-wallet platform in Malaysia among youth: Sem approach." *Management Research Journal* 9 (2020): 1-24.
- [9] Sathish, M. Thangajesu, R. Sermakani, and G. Sudha. "A Study on the Customer's Attitude toward the E-Wallet Payment System." *International Journal of Innovative Research in Technology* 6, no. 12 (2020): 642-645.
- [10] Wu, Jinnan, Lin Liu, and Lihua Huang. "Consumer acceptance of mobile payment across time: Antecedents and moderating role of diffusion stages." *Industrial Management & Data Systems* 117, no. 8 (2017): 1761-1776. <https://doi.org/10.1108/IMDS-08-2016-0312>
- [11] Molteni, Andrea. "A model to evaluate mobile wallet customer experience: identification and assessment of best practices, best fitting value-added services and mobile payment pillars." (2019).
- [12] Cheah, S. Y., Y. C. Chua, J. E. Foo, and H. P. Tan. "Factors of resistance towards e--wallet by people who aged 40 and above in Malaysia." *Qualitative and Quantitative Research Review* 6, no. 3 (2021).
- [13] Tabianan, Kayalvily, S. Q. A. Abdul-Rahman, and Deshinta Arrova Dewi. "QR-code based E-wallet System using Android platform." *INTI Journal* 29 (2019): 1-6.
- [14] Nandhini, K. G., and K. Girija. "Customer perception regards e-wallets." *International Journal of Recent Technology and Engineering* 8, no. 4 (2019): 4061-4067. <https://doi.org/10.35940/ijrte.D8528.118419>
- [15] Lim Choon Seng, Vincent. *The Development of E-payments and Challenges for Central Banks in The SEACEN Countries*. South East Asian Central Banks (SEACEN) Research and Training Centre, 2008.
- [16] Afshan, Sahar, and Arshian Sharif. "Acceptance of mobile banking framework in Pakistan." *Telematics and Informatics* 33, no. 2 (2016): 370-387. <https://doi.org/10.1016/j.tele.2015.09.005>
- [17] Gefen, David, Elena Karahanna, and Detmar W. Straub. "Inexperience and experience with online stores: The importance of TAM and trust." *IEEE Transactions on engineering management* 50, no. 3 (2003): 307-321. <https://doi.org/10.1109/TEM.2003.817277>
- [18] Bauman, Antonina, and Reinhard Bachmann. "Online consumer trust: Trends in research." *Journal of technology management & innovation* 12, no. 2 (2017): 68-79. <https://doi.org/10.4067/S0718-27242017000200008>
- [19] Tsiakis, Theodosios, and George Sthephanides. "The concept of security and trust in electronic payments." *Computers & Security* 24, no. 1 (2005): 10-15. <https://doi.org/10.1016/j.cose.2004.11.001>
- [20] Yousafzai, Shumaila Y., John G. Pallister, and Gordon R. Foxall. "A proposed model of e-trust for electronic banking." *Technovation* 23, no. 11 (2003): 847-860. [https://doi.org/10.1016/S0166-4972\(03\)00130-5](https://doi.org/10.1016/S0166-4972(03)00130-5)
- [21] Saadon, M. S. I. B., and Choi Sang Long. "E-wallet acceptance among undergraduates in Malaysia." *TEST Engineering & Management* 83 (2020): 12990-12998.
- [22] Ong, Mohd Hanafi Azman, and Fadilah Puteh. "Quantitative data analysis: Choosing between SPSS, PLS, and AMOS in social science research." *International Interdisciplinary Journal of Scientific Research* 3, no. 1 (2017): 14-25.
- [23] Spector, Paul E. "Method variance in organizational research: Truth or urban legend?." *Organizational research methods* 9, no. 2 (2006): 221-232. <https://doi.org/10.1177/1094428105284955>