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THE ACCEPTANCE OF E-WALLET IN MALAYSIA

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Abstract: The e-wallet phenomenon in Malaysia is becoming more evident, and attention is growing. However, it is rising at a rate that is slower than its regional peers. This study is aimed to determine the main factors contributing to the acceptance of e-wallet among Malaysians. Besides, it is to identify the correlation between security, discount received, and perceived trust towards the e-wallet system. A set of questionnaires was established and distributed among 130 people living in Malaysia. The result shows that the main factors contributing to security are easy to get fast transactions and safe payment in the future. Followed by the e-wallet provider offers rewards and cashback. The e-wallet platform services are a reliable way to pay under perceived trust. The result also revealed that the most correlated among the factors are perceived trust. Due to the Covid-19 pandemics, it is recommended to use e-wallet payment in minimising the virus transition. For future research, a mixed-method approach can be employed to obtain more accurate information and reduce biasness.

Keywords: E-wallets; E-payment; Acceptance, Malaysia, Covid-19

1. Introduction

Technology has undergone rapid growth in all facets of human life. To facilitate e-commerce transactions, electronic payment (e-payment) has been created between customers and sellers. E-payments can also be defined as the process of payment made without the use of paper instruments (Tella, 2012). The e-payment systems consist of online credit card transactions, electronic wallet (e-wallet), electronic cash (e-cash), online stored value systems, digital accumulating, balance systems, digital checking payment systems, and wireless payment systems (Laudon, Kenneth, & Traver, 2011). Electronic wallets (e-wallets) are used to store data such as credit card numbers, cash, the owner's name, contact details, shipping or billing information, including the customer's address and other data that is used on e-commerce sites at the time of checkout. Via e-wallets, customers need to enter the data once, and it can be used for transactions on any platform.

The use of e-wallets would also increase efficacy in the supermarket. Today, several businesses have built e-wallets and provide them, including big ones like Microsoft and Yahoo (Junadi, & Sfenrianto, 2015). E-wallets are distinguished from credit cards and debit cards. The E-wallet is more realistic since user authentication is not required. The number of sums of money used is the balance of the e-money card previously stored by the customer. E-wallet users do not have to connect to the server, create a signature and create a PIN. The cost is

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lower because communication expenses, such as credit cards, are unnecessary (Nanggala, 2020). Online payment is software for digital e-wallets built on devices such as IOS and Android smartphones. According to Md Wasiul, Ahasanul, Mohammad Arije, Md Alamgir. (2020), old grown-ups' consumers are seen as tech-savvy in the 21st century, as they were born in the age of technology for smartphones.

The most cashless nations are the United Kingdom, France, Sweden, America, China, Australia, Germany, Japan, and Russia, according to statistics provided by the Forex bonuses study (Nag, 2018). But in terms of e-wallet usage, the highest percentage among countries is China, the fast-growing country, which accounts for 76 percent of Chinese consumers, compared with 36 percent of the US population who use mobile phones (Groenfeldt, 2017). In Indonesia, e-wallet adoption was rising, which amounted to Rp24 billion exceeded RP955 billion from the year 2013 to 2017, (Global Data Financial Services, 2018). Furthermore, India also has a high level of market acceptance of E-wallet. The mobile wallet transaction was expanded through state policies to enhance e-payment promotion, smartphone penetration, and the development of telecommunications and payments facilities. In some developing countries, such as Thailand, Vietnam, and Indonesia, cashless payments via smartphones have already gained popularity (Capgemini, 2019). Thailand is now engaged in a mobile payment transaction with 67 percent consumer or 19 percent growth, after Vietnam and Middle East nations with 24 percent and 20 percent growth, respectively, based on the Global Business Insight Survey (2019).

Since March 18, 2020, it has become normal to see people buying the required things at home through digital wallets (Haroon, 2020). Cash transactions are no longer feasible, along with changing times, technical developments, and the Covid-19 pandemic that has occurred worldwide. Digital e-wallet transactions mitigate the complexity of financial transactions' mechanism and encourage the advantages of a cashless economy, such as the ease of financial transactions, confidence, and monitoring of expenses stated by Nguyen, Cao, Dang, & Nguyen, (2016). A rise in online payment transactions is caused by the advantages provided to clients, both society and business. According to Wasiaturrahma, Wahyuningtyas, & Ajija, (2019), the broader community benefits from using online payments due to the perceived ease of use, speed, and protection.

In 2020, many e-Wallets in Malaysia offered almost the same services, such as Grab Pay, BoostPay, and Touch' n Go wallet. What varies is the benefits of using a specific e-wallet that one receives. Grab Pay is one of the most popular e-wallet payment options presently available in Malaysia. According to Teh (2019), the integrated e-wallet payment system allows users to be part of the Grab ecosystem, which they can now use to pay for Grab Car rides or Grab Food delivery. Booth is another e-wallet system that helps users win discounts, send and receive e-vouchers, and even more money to and from user accounts via point redemption. Touch'n Go (TnG) was mainly used to pay the toll paid on significant highways and now in partnership with Alipay to introduce the e-wallet system. AliPay is another e-wallet system from China that helps you make hotel reservations, doctor appointments, and even purchase movie tickets via the app (Teh, 2019).

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The main objective of this paper is to determine the correlated relationship that influences Malaysian to accept the e-wallet as a payment method. Consequently, security (SY), discount received (DR), and perceived trust (PT) are independent variables that may have a significant correlation with the acceptance of e-wallet and to see the most factors contribute to accept the e-wallet system in this study. The paper also determines the correlation and strength between factors.

2. Research Problem

However, according to Jayaseelan (2017), e-wallet services are popular in India and China but are just starting to appear in Malaysia. Malaysia could change from cash to cashless after increasing cashless payments (Yong, Kong, Lee, Lim Sin, Ong, Ping, Tunku, & Rahman, 2018). E-payment is considered essential for digital economy productivity and efficiency, which is rapidly rising (Bernama, 2017). All of the advances in technology and the overwhelming numbers of Malaysians holding debit cards and cell phones have optimised QR code payments, a relatively inexpensive and simple task (Bernama, 2017). As technology advances using artificial intelligence and algorithms based on machine learning, it is clear that digital payments are generating ripple effects globally. However, there is still a long way to go, especially in Malaysia. According to Gowri (2019), over 20 e-wallets currently available in Malaysia, each with its perks and benefits. Too many options can turn off interest using the e-wallet. Consumers need to choose because they want to know which e-wallet gives the best discounts, which gives back cash, loyalty card services, etc. In the end, consumers are likely to carry on with technology they are already familiar with, ie. Credit cards and debit cards. In Malaysia, on the other hand, BoostPay, Touch' n Go wallet, and Grab Pay is more common. Compared with Indonesia, however, the adoption of e-wallets in Malaysia is still in its infancy (PWC, 2018).

Even the e-wallet gives benefits to use, such as having an identification number backed up with a money-back guaranteed, user-friendly, and easy payment process. According to Bakar & Kiyotaka (2020), some problems occur that involve personal liability in the event of fraud. Consumer and their financial details are needed to perform the transaction, and many consumers are still afraid of someone intercepting their payment information or data. As we know e-wallet system let consumer pay through an app, which means your smartphone is all you need when you go shopping (Gowri, 2019). On the other hand, people still consider their mobile phones as insecure and unreliable for payments as other methods, such as direct bank transfers or even credit cards. Furthermore, most users hesitate to use mobile devices because of security issues (Chauhan & Shingari, 2017). Till now, mobile payments are not considered secure. Apart from this, one primary reason is that there are chances of losing money. Many respondents specified that it takes days to get the money back, and this reconciliation is a time-consuming task. Web security risks are irregularities that might occur when using a technology where information technology can be a computer virus, data damage, fraud, and theft—one of the problems faced by system users when conducting transactions using Fintech (Larasati, 2014).

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While e-wallets are becoming more common, they are still not widely used in Malaysia. The acceptance by Malaysians of the e-wallet system is one of the critical concerns. If this new technology concept's approval is lacking, especially among young consumers, the latest technology concept of e-wallets will not be successful. Therefore, this research is aimed at studying the most factors determining the acceptance of e-wallets in Malaysia. Due to the drastic changes in dealing with cashless transactions, this research wanted to learn the approval of Malaysia's e-wallet transaction. Furthermore, no researcher has previously attempted to assess the acceptance of the e-wallet transaction in Malaysia. Therefore, this study will give information on most factors that will affect the acceptance of e-wallet and the level of correlation between each factor determining the use of e-wallet.

3. Literature Review

3.1 Security and Acceptance of E-Wallet

Mobile payment transactions are also dangerous and unpredictable (Liu, Yu, Li, Ji & Leung, 2020; Bagla & Sancheti, 2018). They could be linked to illegal activities, such as hacking, account takeover, fraudulent transactions, and data breaches (Marria, 2018). Similarly, customers have considered some possible risks in banking and online payment through an application that could prevent them from acting (Marafon, Basso, Espartel, de Barcellos, & Rech, (2018). Privacy and security are factors affecting the use of e-wallets, which is found to be more suggestive, based on research by Soodan and Rana (2020). Meanwhile, Kaur, Li, Iqbal, Gonzalez, & Stakhanova, (2018) indicated that payment without a security feature via an e-wallet could result in unauthorised access to personal information and a lucrative opportunity for cybercriminals to breach the data. According to Marimuthu and Roseline (2020), e-wallet has gained popularity due to effortless transactions. However, the key factors that should be considered are still lack of understanding and knowledge among individuals and fear of making transactions due to security issues. Mobile payment technology has faced high-profile security breaches in the past, leading to low consumer trust in security (Johnson, Kiser, Washington, & Torres, 2018).

Mobile payment technology relies a great deal on security, a considerable number of customers are using it, and its usage is on the rise. And because of this, the consumer must be highly aware of their transaction level using mobile payment. Previous findings on security have been provided by Amoroso and Watanabe (2012) and Bagla & Sancheti (2018) that demonstrate a positive impact on intention to use and trust were generated from (or perhaps confirmed) research conducted by them. These previous researchers, the results of their investigation, demonstrated the positive qualities of new technology security. Previous studies have suggested that mobile payment may be helpful in certain circumstances, and these current studies serve to extend those earlier findings. According to Md Wasiul Karim et al. (2020), since the customer has no prior experience with technologies that concern security and privacy, they may be worried about these new ones. As a result, a big issue regarding the point of transactions done via smart technology has become the high development speed and associated security concerns. Furthermore, the case had been raised by Ahmad, Khan, & Jan, (2010) that users' concerns about privacy and security had accelerated rapidly, and this has helped lead to their reluctance to divulge personal information (for instance, credit or debit

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card numbers) on the internet and e-commerce sites. Finally, according to Barry & Jan (2018), the consumer may choose to use their e-wallet for all payments in the absence of either more privacy or more security.

H1. There is a significant correlation between acceptance of security and acceptance of e-wallet in Malaysia

3.2 Discount Received and Acceptance of E-Wallet

E-wallets are typically stored by users and can be used for e-commerce on virtually all websites. Besides, internet banking services Lin, Wang, & Huang, (2018) claimed the cost-benefit as an individual option to gain the most benefits with the least cost incurred for their decision. Customers often weigh the inevitable costs after a decision has been taken and compare the value or services they will receive before introducing new technology. Assume that by embracing mobile payments, people find it easy to save time, money, and comfort. In that case, they would continue to collect it freely so that the cost perceived will impact the user's value to consider using mobile payment. Since electronic payments are cheaper than paper-based payments, as more individuals can now use electronic payments, the speed of transactions is quicker. The paper comes in the form of checks, supplier invoices, and payments to recipients that create environmental problems by electronic means (Nizam et al., 2019)

Given the above, the following hypothesis is proposed:

H2. There is a significant correlation between acceptance of e-wallet and discounts received.

3.3 Perceived Trust and Acceptance of E-Wallet.

Trust in technology leads to more robust evaluations and attitudes towards the developments in which technology is used. For both online and offline environments, trust is an essential element that needs to be considered when making a transaction. The trust between customers and vendors is not easy to build on a public network such as the internet. Trust is used as a medium by consumers when they try to reduce the uncertainty of the transaction. Technology requirements that fulfil the commitment and are reliable and stable would have a beneficial effect on the acceptance of e-wallet use (Kalinic, Marinkovic, Molinillo, & Liébana-Cabanillas, 2019). According to Hillman and Neustaedter (2017), consumers thought that e-wallet services were feasible and valuable, and past experiences influenced consumers' confidence in the use of e-wallet services.

Trust is considered one of the main factors to be studied in an e-wallet, as a high level of trust can contribute to greater customer acceptance of this emerging payment for technology. From the e-wallet perspective, it is noteworthy to examine trust by ruminating on the meaning of trust and the inconclusive results in e-wallet (Abd Malik & Annuar, 2018). Besides, the Cao, Dang, & Nguyen, (2016) study investigated the factors affecting consumer intention in mobile wallets. The elements used in this study are perceived trust, ease of use,

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enjoyment, usefulness, behavioural control, and social impact. This study has disclosed a significant association between personal beliefs, resources, and social influences to use mobile payments. Based on the above argument, the following hypothesis is proposed:

H3. There is a significant correlation between acceptance of e-wallet and perceived trust.

A model related to security, low cost, and perceived confidence in accepting the e-wallet system in Malaysia has been created based on the above arguments. The conceptual structure of this analysis is outlined in figure 3.

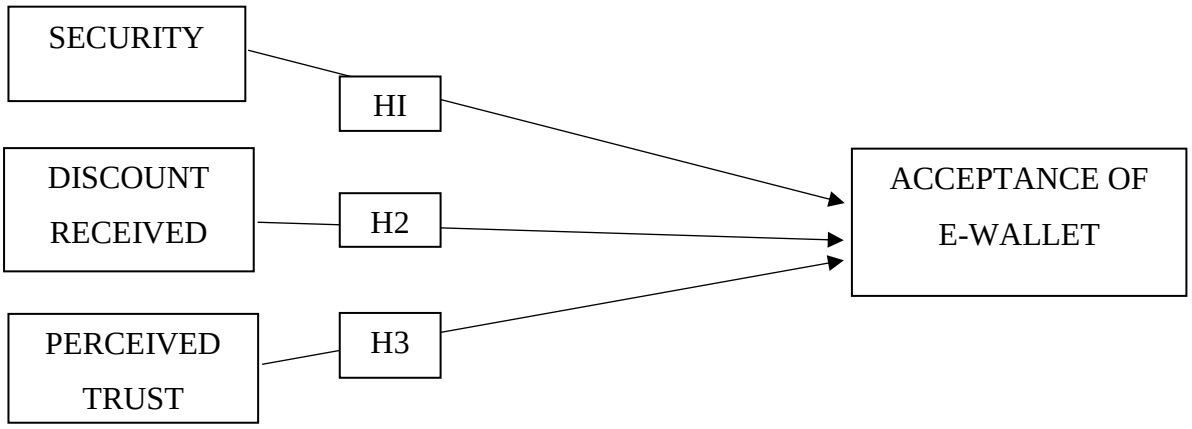

Figure 3: The Conceptual Framework

4. Methodology

A quantitative analysis methodology is used in this study, which is a descriptive and cross-sectional study. Quantitative techniques are analysis methods that use numbers as the basis for generalising a phenomenon (Regoniel,2015). A research strategy that emphasises quantification in data collection and analysis has been described as quantitative research (Bryman, 2016). The study approached the answers to the questions, beginning with how many, how much, and to what extent (Rasinger, 2013). Positivist scholars believe that the social universe is made up of a concrete and immutable truth that can be objectively quantified. According to Rahman (2017), by prioritising standardised tests and structural observation, experiment, survey results, and statistical analysis, the positivist paradigm is dominant in social and educational study. Thus, in determining research outcomes, the quantitative research approach has been considered to be influential. The survey instrument is primarily intended to classify e-wallet acceptance factors in Malaysia.

The population in this study is about 32.7 million, which is the population of Malaysia, and it takes as randomly to being the respondents in the research. Convenience sampling was chosen due to the covid-19 situation and difficulties in getting the respondents. The questionnaires were distributed to 130 selected respondents throughout Malaysia via an online google form. Finally, to decide the variables that could affect the acceptance of e-wallets in Malaysia, the Pearson Correlation analysis was carried out. The 5 Linkert scale

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adopted in this study, and the statistical analysis of the results was performed using IBM SPSS Statistical (SPSS) package.

5. Result

5.1 Demographic Analysis

The distribution of the questionnaire was completed within two months. The response rate was 100%. A total of 130 usable data were coded and analyzed. 69% of the respondents are male; meanwhile, the female is 61%. The majority of them are Malay (70.8%), followed by Indian (14.6%), Chinese (12.3%), and others (2.3%). Meanwhile, 58.5% are between the age of 18 -25. 70% is single, and 30% is married. The majority (42.3%) of the respondents is from Selangor, and the lowest is from Sarawak and Perlis (1.5%). Almost all of them (96.9%) knew about the e-wallet, and only 3.1 % said they never know about it. They also used e-wallet more than two times in a month (43.1 percent). Another 26.2% used less than two times in a month. Finally, only 6.9% claimed they never used an e-wallet.

5.2 Main factors that contribute to the acceptance of e-wallet

5.2.1 Security

Table 1 displayed that the respondents agreed that the highest factors contributing to using an e-wallet are safe (M=3.98, SD = 0.742). The respondents were also satisfied with the security in the e-wallet system (M=3.84, SD=0.766). While the lowest factors contributing to security are the data in the e-wallet system is safe (M=3.65, SD=0.825).

Table 1: Security - Factors contribute to the acceptance of e-wallet

	N	Min.	Max.	Mean	Std. Deviation
1. I believe that my details in the system are safe	130	2.00	5.00	3.6462	.82464
2. It is a safe transaction	130	2.00	5.00	3.9769	.74152
3. I think there is no harmful activities while using e-wallet	130	2.00	5.00	3.6846	.87191
4. It keeps my payment credentials secure	130	2.00	5.00	3.7615	.78557
5. I am satisfied with the security in e-wallet system	130	2.00	5.00	3.8385	.76558

5.2.2 Discounts Received

Table 2 shows that the most factor contributing to the discount received is the e-wallet system that offers the users rewards and cashback (M=3.98, SD=0.647). It followed by an e-wallet provides a lot of discount and coupon for its users (M=3.97, SD=0.698). While the lowest factors contribute to the discount received in the e-wallet system is can make people use the system continuously without any resistance (M=3.90, SD=0.801).

Table 2: Discount Received – Factors contribute to the acceptance of e-wallet

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	N	Min.	Max.	Mean	Std. Deviation
1. E-wallet system offers a lot of discount and coupon for its users.	130	2.00	5.00	3.9769	.69845
2. The system offers the users rewards and cashback.	130	2.00	5.00	3.9846	.64681
3. The discount on an e-wallet can make people use the system continuously without any resistance.	130	2.00	5.00	3.9077	.80161
4. I know that e-wallet system often offers a promo and vouchers for the user to redeem in future	130	2.00	5.00	3.9538	.73518
5. I am very likely to recommend to my friends about discount on e-wallet	130	2.00	5.00	3.9462	.69674

5.2.3 Perceived Trust

Based on Table 3, the respondents agreed that the highest mean of the respondents agreed that e-wallet platform services are a reliable way to pay (M=3.91, SD=0.603). It followed by the belief of the e-wallet platform services providers will do everything to secure the transactions for users" (M=3.87, SD=0.615). Followed by the system is backed by Money-back Guarantee (M=3.81, SD=0.769). In contrast, the lowest mean for perceived trust if they believe that technology-related errors are quite rare" (M=3.68, SD=0.863).

Table 3: Perceived Trust – Factors contribute to the acceptance of e-wallet

	N	Min.	Max.	Mean	Std. Deviation
1. I believe that technology related errors are quite rare	130	2.00	5.00	3.6846	.86297
2. The system is backed by Money-back Guarantee	130	2.00	5.00	3.8077	.76853
3. I believe e-wallet platform system is trustworthy	130	2.00	5.00	3.7692	.762288
4. E-wallet platform services are reliable way to pay	130	2.00	5.00	3.9077	.60291
5. I believe e-wallet platform services providers will do everything to secure the transactions for users	130	2.00	5.00	3.8692	.61491

5.3 Pearson Correlation Analysis

Pearson correlation coefficients test is used to identify the correlation between security, discount received and perceived trust towards acceptance of e-wallet. Meanwhile, the Pearson Correlation Coefficient Rule of Thumb by Scholar et al. (2018) in Table 4 is used to interpret the relationship's strength between the variables.

Table 4: Pearson Correlation Coefficient Rule of Thumb

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Observed Correlation Coefficient	Interpretation
0.00–0.10	Negligible correlation
0.10–0.39	Weak correlation
0.40–0.69	Moderate correlation
0.70–0.89	Strong correlation
0.90–1.00	Very strong correlation

Source: Schober et al. (2018)

5.3.1 Correlation Between security, discount received, and perceived trust, and the acceptance of e-wallet in Malaysia.

Based on the above argument, the following hypothesis guides the correlation:
H1: There is a significant correlation between acceptance of security and acceptance of e-wallet in Malaysia.
H2: There is a significant correlation between acceptance of e-wallet and discounts received.
H3: There is a significant correlation between acceptance of e-wallet and perceived trust.

Based on Table 5, the result shows a significant correlation between security and acceptance of e-wallet (P-value = 0.000<0.05). Hence, the H1 is accepted. Meanwhile, the study found out that the correlation is moderate (0.587). The study found there is a significant correlation between acceptance of e-wallet and discounts received (P < 0.000) at a moderate relationship (0.461) as illustrated in Table 5. The finding of the study indicates that there is a significant correlation between acceptance of e-wallet and perceived (P < 0.000) at a moderate relationship (0.399).

Table 5: Correlations

		Total dv	Total sq	Total dr	Total pt
Total dv	Pearson Correlation	1	.587**	.461**	.399**
	Sig. (2-tailed)		.000	.000	.000
	N	130	130	130	130
Total sq	Pearson Correlation	**.587****	1	.512**	.673**
	Sig. (2-tailed)	**.000**		.000	.000
	N	130	130	130	130
Total dr	Pearson Correlation	**.461****	.512**	1	.699**
	Sig. (2-tailed)	**.000**	.000		.000
	N	130	130	130	130
Total pt	Pearson Correlation	**.399****	.673**	.699**	1
	Sig. (2-tailed)	**.000**	.000	.000	
	N	130	130	130	130

**. Correlation is significant at the 0.01 level (2-tailed).

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6. Discussion

Unanimously, respondents highlighted that the security, discount given by the e-wallet provider, and perceived trust would lead them to uses e-wallet payments services. The depth analysis found that the significant correlation between security, discount received, and perceived trust towards acceptance of e-wallet is accepted. Meanwhile, in terms of strength, the correlation is at a moderate range. Based on the above discussion, it suggests that the provider of the e-wallet must put the security issues as the main priority to gain confidence from the people. The providers need to explain or sharing information to users on how secured is the e-wallet system. According to Marimuthu and Roseline (2020), the e-wallet has gained popularity because of its simple transactions but still lacks people's knowledge and awareness and fear making the e-wallet transaction. Other than that, the government should also look back on their policy on the security of the e-wallet payment.

Simultaneously, the e-wallet provider must also give a discount to users who use e-wallet payments to encourage them to use. Users usually will be attractive if they can get a discount or present if they engaged in the e-wallet payment. The e-wallet payment needs to be aggressively done because our government has encouraged us to use cashless transactions to reduce contact during the covid 19 pandemics. Chawla & Joshi, (2019) support this finding. Jun, Yoo, & Choi, (2018) said that consumer prefers to use e-wallet if they received additional benefits including discounts, cashback transfers, coupons, and other promotional types. The provider must professionally manage the e-wallet system to build the level of trust of the users. Abd Malik and Annuar (2020) said that a high degree of trust would lead to greater consumer acceptance of this emerging payment for technology. On the whole, as far as online transactions are concerned, customers tend to choose a secure forum to make payments because of potential risks and fraud. For current business people, they should focus on elements that can boost e-wallet services. At the same time, potential entrepreneurs will get a sense of what customers want in an e-wallet payment service. Furthermore, financial institutions should boost transaction speed and convenience to increase customer interest in adopting e-wallet.

7. Conclusion

This research found out that security, discount received, and perceived trust correlates towards acceptance of e-wallet in Malaysia. There are some limitations found in this study. The findings of this study are limited to only 130 samples, which may not necessarily reflect that of Malaysia's general population. There is a need for a notable awareness and understanding of the security, discount received, and perceived trust related to the Technology Acceptance Model (TAM) from a different research perspective. One suggestion for future research is to perform the same study involving different education levels and categories of the respondent from B40, M40, and T20 groups to collect more opinions in e-wallet and increased the number of respondents. The study has important and practical implications for understanding how an e-wallet is accepted in Malaysia. Due to the increased knowledge of cashless transactions due to the covid 19 pandemic, it appears that the use of e-wallet would increase. To minimise the virus transition, all Malaysians must use or try to use the e-wallet. Finally, since this study uses a questionnaire to collect the

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respondent's perceptions, the result is limited to their honesty and seriousness in answering questions. Hence, the study recommended that the mixing method be used in future research to a better result.

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