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Siti Nazirah Omar, Siti Nurul Aini Mohd Rodzi, Siti Radhiah Omar

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Analyzing Factors that Influence Customers' Behavioural Intention on Using E-Wallet Services at Retail Outlet

Siti Nazirah Omar, Siti Nurul Aini Mohd Rodzi

Faculty of Business Management, Universiti Teknologi MARA Kampus Sungai Petani 78000 Alor Gajah, Melaka Email: nazirah279@uitm.edu.my, nurulaini@uitm.edu.my

Siti Radhiah Omar

Faculty of Science and Technology, Universiti Sains Islam Malaysia 71800, Nilai, Negeri Sembilan

Email: sitiradhiahomar@gmail.com

Abstract

Nowadays people in Malaysia are using an e-wallet to make a payment whether through online or offline shopping and it is becoming progressively popular. As many providers offer their e-wallet services, Malaysian are now preferring cashless transactions even when doing daily shopping in the malls or retail outlets. For that reason, this research aims to analyze the factors that influence customers' behavioural intention in using electronic wallets as mechanism to pay at retail outlets. Behavioural intention as a dependent variable and Social Influence, Perceived Ease of Use, Perceived Usefulness, Perceived Trust, and Perceived Risk as independent variables. Then, 189 respondents in the rural area were being selected as sample size for this study and they were returned the survey forms completely. The results display a significant positive correlation between independent variables with behavioural intention except for perceived usefulness.

Keywords: E-Wallet, Shopping, Retailer, Rural, Malaysia

Introduction

Electronic Wallet or E-Wallet is now being incorporated into daily life, especially in the method of communication, in emerging nations like Malaysia. Since mobile phones are currently in high demand, there is no end to the advancement of mobile communication technologies. According to estimates, there are more people using cell phones than people with bank accounts globally (Rajan, 2016). Numerous businesses in Malaysia have now successfully developed a wide range of mobile-based services, including mobile banking, mobile commerce, mobile payments, and mobile transfer and mobile wallets. These services offer several benefits for the user because they make it simple for them to manage and complete their tasks quickly. For instance, mobile payment systems provide a range of

technological advancements and assortment of offers to users for increased convenience (Price & Pilorge, 2009). Additionally, a mobile payment system or electronic wallet may undertake a variety of functions like bill payment, money transfers, reload top-ups, and payment of purchases.

Besides, due to the ease of use and convenient features built into the services, e-wallets have recently become popular for online shopping. The market for mobile payment technologies is anticipated to increase at a compound annual growth rate (CAGR) of 26.2%, from \$68.85 billion in 2021 to \$86.91 billion in 2022 (Research and Markets, 2022). A few nations, including China and India, were singled out as having the highest percentage of citizens that use ewallets. More than 145 million unbanked families reside in India, a developing nation, and can now be newly incorporated into the financial system using mobile phones (Singh, 2016). The efforts made by governments to encourage a cashless society are a key factor in the market expansion of mobile payment systems. An economy that does not use actual currency or banknotes for financial transactions is known as a cashless economy. In this regard, governments all over the world are implementing a number of steps, together with central banks, to move towards a cashless economy, which ultimately results in the expansion of the market for mobile payment technology. Currently, by referring to the BNM, under the category "e-money issuers," 53 e-money issuers have been listed, including 47 non-bank emoney licenses. Given the number of options available, it has been proved that the growth of e-wallet as a payment service is increasing tremendously (Comparehero.my, 2022).

Recently there has been an upsurge of interest in Malaysia that offers mobile payment services. In the first quarter of 2022, 68% of Malaysian respondents to an Oppotus study on digital payments said that they have made payments via e-wallets. Due to the COVID-19 epidemic, the percentage of people who utilized digital wallets expanded from the fourth quarter of 2019 to the first quarter of 2020 (Statista, 2022). The report also demonstrates that e-wallets are here to stay and have even seen a significant increase in usage among Malaysian customers as a result of the pandemic's consequences. Modern consumers are looking for benefits from digital payments, such as contactless payment to help them adhere to social distancing and COVID-19 safety measures. E-wallets also enable fast transactions, which reduces line-ups at busy retail locations. As a result, customers have a far better experience, and businesses have less work to do. Besides offering cutting-edge goods and services, a successful company should also expand its range of payment alternatives to keep up with evolving consumer preferences.

Furthermore, with the development of e-wallets, it has drastically changed the cultural norms and behaviour of individuals in terms of the acceptance of new technology users and their confidence in system security. Apart from that, the initiative by Bank Negara Malaysia (BNM) to introduce the Real-time Retail Payments Platform (RPP) in 2018, encourage e-wallet providers to participate in the linkages by offering DuitNow Transfer and DuitNow QR services to the method of payment (Bank Negara Malaysia, 2021). Moreover, there are a lot of players from financial technology industry that bring forward e-wallet features in the Malaysia's market such as TAPAY, BOOST, Shopee Pay, We-chat, Ali-pay, Samsung Pay and Grab Pay.

However, not every user of mobile phone has realized the benefits of this technology. They are more comfortable to use traditional way to make a payment by using cash and debit or

credit card especially in the rural area. According to (Swilley, 2010), users resist a technology if they feel it will impede their daily lives in terms of a learning curve, changing how they go about their everyday lives and also resist if it impedes social interaction as well. This scenario is happened by several factors that are related to the attitudes and intentions of the consumer when E- wallet services are adopted during the purchase transaction.

In order to identify the factors that influence consumers to adopt e-wallet, this research had discovered behavioural intention from different perspectives. Researchers are interested in determining how well the population is aware of this technology and how willing they are to use it. The researchers were identified that some respondents like using an e-wallet due to its convenience characteristics, while others did not, citing issues with security, complexity, and level of understanding. In certain circumstance, most of consumers in Malaysia are reluctant to use e-wallet services because of their social influences circle. Majority of them are not really exposed to e-wallet services and they don't have enough knowledge about this technology as well. Thus, this will lead to low consumer adoption towards e-wallet services. In addition, the negative opinions or thought given by their families, friends or relatives who have bad experienced when using this technology will also affect the behavioural intention to adopt an e-wallets services. According to Venkatesh and Davis (2009); Venkatesh et al (2003); Schierz et al (2010); Venkatesh et al (2012), it is observed that family, friends, peer groups and virtual communities on social networking media have substantial influence on the behaviour of people.

Other than that, consumers also concern about the level of security and privacy of e-wallet. Several studies investigated the impact of security and privacy on the satisfaction of online consumers. (Parasuraman et all., 2005; Wolfinbarger and Gilly, 2003). The result shows a positive impact between security and privacy on online consumer satisfaction. The users refused to use e-wallet services because they are worried about their privacy and personal information especially identity card's number, telephone number and any other personal details that will be revealed to the third party for any other illegal purposes Therefore, perceived trust and perceived risk are important factors to determine the user's intentions to use e-wallet services.

In surveys conducted over the past two years, the majority of respondents indicated that they would continue to use e-wallets in Malaysia even in the absence of rewards. The use of e-wallets will undoubtedly continue even without cash backs, rebates, or promotions as Malaysians grow acclimated to them due to their speed and convenience (Oppotus, 2021). Recently, the Prime Minister of Malaysia, Datuk Seri Ismail Sabri Yaakob had launched the National Retail Sector Digitalisation Initiative (ReDI) Programme to encourage the use of e-wallets and to boost the cashless society environment (Bernama, 2022) and the Domestic Trade and Consumer Affairs Ministry (KPDNHEP) aims 15,200 rural retailers across the country to adopt the digital business model or e-wallet. Next, e-wallet players are now expanding outside of urban regions, giving people in rural areas greater access to financial services especially the younger generations which also make them less vulnerable to theft (Theedgemarket, 2021).

Therefore, this research is being pursued to determine the factors that can influence consumer behavioural intention to use e- wallet services specifically in the rural area. Then,

the investigation of relationship between Social Influence, Perceived Ease of Use, Perceived Usefulness, Perceived Trust and Perceived Risk and Behavioural Intention to use e-wallet is being implemented in this research. This study was adapted the Technology Acceptance Model (TAM) as refer to Figure 1. To date, The Technology Acceptance Model (TAM) is now accepted as a model to determine technological adoption globally (Rosli et al., 2022).

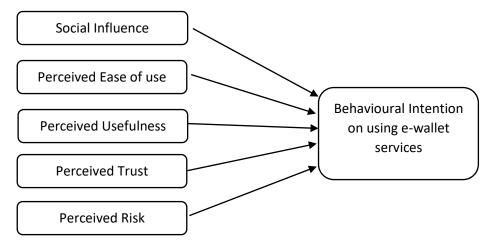


Figure 1: Research Framework

Research Objectives

- 1. To determine the significant relationship between the social influence, perceived usefulness, perceived ease of use, perceived trust and perceived risk towards behavioural intention on using e-wallet services.
- 2. To identify the most influence factors impacted on consumers' behavioural intention on using e-wallet services.

Literature Review

Social Influence

Humans who live in a society might be socially influence or may influence people around them. Social influence may be interpreted as the situation where a person beliefs, perceptions, values, attitudes, intentions, and behaviours being affected by the society (Lim, 2022). Similarly, Aydin (2016) stated that the individual behaviour usually influences by the verdict of important person around them such as family and close friends. Apart from that, in term of consumption of product, (Riquelme & Rios, 2010) found that the opinions of family, relatives and colleagues towards some product may also influence individual decision to consume the product. Therefore, when consumers express their gratitude towards services or products they consumed, unintentionally it will influence others to try the same product or services. Thus, individual will feel relief to consume the same product as their uncertainty about the product may be eliminated by the significant review of others (Aydin, 2016). A study by (Prabhakaran & Sarika, 2020) have proved that the social influence has significant positive correlation with behavioural intention on adoption of mobile wallets. Similarly, social influence was found to have positive impact on the adoption of e-wallet in Malaysia (Teoh et al., 2020). On the other hand, research by Intarot & Beokhaimook (2018) found that social influence does not affect the acceptance of e-wallet in Thailand.

Perceived Ease of Use

According to Mathieson (1991); Gefen et al (2003), the perceived ease of use refers to the level of effort required during adoption and using of technology. Later, (Basuki et al., 2022) determine perceived ease of use as a situation where a person realized that a system can be adopted effortlessly. According to (Olivia & Marchyta, 2022), the perceived ease of use does have positive implication towards the use of e-wallet. In addition, (Liat & Wuan, 2014) also declared that consumer perceive ease of use level was influence by convenient check out process and efficient product searching tools. However, recent study based in Indonesia, found that perceive ease of use do not significant with the intention to use e-wallet to pay for item purchased (Farida & Ardiansyah, 2022). Similarly, (Aji et al., 2020) confirmed that the easiness of e-wallet alone is worthless unless provided with significant benefit.

Perceived usefulness

Perceived usefulness can be defined as a perception of individuals on the ability of technology to enhance their efficiency while doing transaction (Davis, 1989). The evolution of e-wallet to facilitate payments of various transaction are greatly useful to the user nowadays. Likewise, it may avoid mistake in returned and able to expedite transaction (Wardana et al., 2022). Consequently, the compatibility, flexibility and accessibility through smart devices are the reasons on the adoption of e-wallet by young adults (Haque et al., 2020). In fact, it was proved by (Abu Bakar et al., 2022) that perceived usefulness has strong correlation with intention to utilize e-wallet application. However, perceived usefulness itself does not sufficient to affect continuance of using e-wallet unless accompanied with customer satisfaction (Olivia & Marchyta, 2022).

Perceived Trust

For instance, online shopping allows consumers to purchase items without so much energy and time, however, the incident of fraud usually become a barrier for these activities. According to (Hong & Cho, 2011), trustworthiness are the critical factors that influence consumer to shop online. Consumer depends on their level of trust when using technology systems because they have no direct control over the actions of the vendors. Therefore, as for the e-wallet users, their perceived trust depends on the level of security and privacy of the e-wallet application (Rajan, 2016). Besides, study carry out by (Nguyen & Huynh, 2018) revealed that perceived trust and risk have significant impact on e-payment adoption. Conversely, (Kurnianingsih et al., 2022) in their study, discovered that perceived trust was found irrelevant to influence the decision to adopt the e-wallets. Contrary, recent study in Malaysia by (Abu Bakar et al., 2022) indicated that perceived trust has influence the intention to use the e-wallet.

Perceived Risk

As a result of pandemic of Covid-19, people become more careful and curious about their daily activities. Compared to before the spreading of Covid 19, the adoption of e-wallet seem increase drastically (Oppotus, 2021) as it is the safest way to avoid the possibility of spreading COVID-19 by avoiding physical contact. Thus, it shows that the adoption of e-wallet was influence by the perceived risk of the user (Dongsen, 2022). In this situation, the perceived risk can be defined as the feeling of uncertain by the users of e-wallet towards the coronavirus on the physical money (Aji et al., 2020). Other than that, perceived risk also can be referred as uncertainty about the future as a result of purchasing activities, especially on the effect of

the product and service quality, thus may influence customer purchase behaviour (Zhang & Yu, 2020). The e-wallet application comprises the important personal data such as Identity Card number, email address and others, the issues of security and privacy risk that are involved in making any transaction using e-wallet also give implication to the intention of using the e-wallet. Therefore, the privacy and security are the important elements to be considered by providers to create positive acceptance of e-wallet (Haque et al., 2020).

Behavioural Intention

According to Fishbein and Ajzen (1975), behavioural intention is a degree of intensity of an individual's intention to perform a specific behaviour. A study by Khajehshahkoohi et al (2022) found that perceived ease of use and usefulness have positive influence on behavioural intention to adapt technology. Other study also indicate that perceived usefulness and trust have positive impact on behavioural intention to use an application (Fakhri et al., 2022). Nevertheless, (Nisa & Solekah, 2022) found that perceived usefulness, security and social influence do not have significant influence towards the intention to use e-wallet. On the other hand, a local study indicated that, perceive ease of use and social influence do influence the intention to use e-wallet application (Janteng & Dino, 2022).

Research Methodology

This study primarily focuses on Alor Gajah people who had experience or knowledge on using e-wallet as payment service at retail outlets. The sample size for a regression kind of analysis should be between five and ten times the number of independent variables, according to Hair et al (2011) and this study used a sample size of 189 respondents to demonstrate that it was larger than the minimal or required number. Besides, the convenience sampling method is being used in this study. In addition, the researchers had distributed the questionnaires through online in collecting the data to be analyzed.

Measurement

The data that have been obtained were then analyzed using reliability analysis and multiple regression analysis. Next, the consistency and stability of a scale were evaluated using reliability analysis and Cronbach's alpha was employed in this study to measure reliability metrics. Based on the rule of thumb, the Cronbach's alpha coefficient ranges from 0 to 1, with a number above 0.7 being considered as acceptable and a value below 0.7 being regarded as dubious.

Variables	Of Item	Cronbach's Alpha
Social Influence	4	0.866
	3	0.851
Perceived Ease of Use		
	6	0.787
Perceived Usefulness	3	0.771
	4	0.765
Perceived Trust	4	0.913
Perceived Risk		
Behavioural Intention		

Table 1 Cronbach's Alpha analysis

The reliability analysis findings for the six variables; social influence, perceived ease of use, perceived usefulness, perceived trust, perceived risks and behavioural intention were displayed in Table 1. All six variables' Cronbach's alpha values were between the range of 0.7 and 0.9 and therefore the results are regarded as falling inside the permissible range. However, the behavioural intention and perceived risk measures had the highest and smallest Cronbach's alphas with the values of 0.913 and 0.765 respectively.

Results and Analysis

In this study, multiple regression analysis was used to examine the relationship between the dependent variable and the independent factors. The five independent variables of this study showed that 66.7% of the overall variation determine the intention to use e-wallet services at retail outlet (R² of 0.667). According to Table 2, the results of multiple regression analysis are summarized. As can be seen, social influence, perceived trust, perceived ease of use and perceived risk indicated significant relationship toward behavioural intention which the p-values for these three independent variables are all below the alpha value of 0.05. On the other hand, perceived usefulness has no significant relationship to the dependent variable as their p-values are higher than 0.05 at 0.576. Thus, the results revealed that perceived usefulness has no significant behavioural intentions of using e-wallet at retail outlet.

Table 2

Multiple Regression Analysis Results

	R ²	β	p-value	Hypothesis Result
0.000	0.67		-	-
		0.19	0.003	0.866
		0.16	0.009	0.851
		0.27	0.576	0.787
		0.32	0.000	0.771
		0.33	0.000	0.765
	0.000	0.000 0.67	0.19 0.16 0.27 0.32	0.190.0030.160.0090.270.5760.320.000

Hypothesis Testing

The hypothesis testing and results statements are displayed in Table 3.

Table 3

Research Hypothesis

H1	There is significant relationship between social influence and behavioural
	intention on e-wallet services at retail outlet
H2	There is significant relationship between perceived ease of use and behavioural
	intention on e-wallet services at retail outlet
H3	There is no significant relationship between perceived usefulness and behavioural
	intention on e-wallet services at retail outlet
H4	There is significant relationship between perceived trust and behavioural
	intention on e-wallet services at retail outlet
H5	There is significant relationship between perceived risk and behavioural intention
	on e-wallet services at retail outlet

Hypothesis 1 is being tested whether the social influence have an impact on behavioural intention. Refer to Table 2 results, it showed that social influence has a significant value of 0.003, which is less than the alpha value of 0.05. As a result, there is a strong relationship between social influence and customer's intention to use e-wallet. This was strongly supported by a study that has demonstrated a significant positive relationship between social influence and behavioural intention towards the usage of mobile wallets (Prabhakaran and Sarika, 2020). Similar findings also indicate that social influence has a favourable effect on Malaysia's adoption of e-wallets (Tenk et al., 2020).

Then, for Hypothesis 2 is to ascertain whether perceived ease of use will affect the likelihood the customers' intention to use e-wallet. The alpha value for perceived ease of use is 0.009, which is lower than the significant value of 0.05. This validated that the variable significantly influences customer behavioural intention in using e-wallet payment service at retail outlet. The outcome of this study is in line with earlier studies done by (Olivia and Marchyta, 2022; Liat and Shi Wuan, 2014). According to their study, they asserted that the use of an e-wallet is positively impacted by perceived ease of use.

Next, Hypothesis 3 is to verify the perceived usefulness influence on behavioural intention. Perceived usefulness variables' significant value is 0.576, which is greater than the alpha value of 0.05. Thus, there is no significant relationship between perceived usefulness and behavioural intention. Nevertheless, this result is not consistent with a study done by Abu Bakar et al., 2022, which validated that perceived usefulness has strong relationship with intention to exploit e-wallet application. On the other hand, Olivia & Marchyta (2022) agreed that to have the persistent of using e-wallet, perceived ease of use alone is insufficient unless it is complemented by customer satisfaction. Thus, this hypothesis was relevantly supported. Furthermore, Hypothesis 4 is being tested to determine the effect of perceived trust on behavioural intention. The result specified significant relationship between both variables since the p-value of perceived trust is 0.000 which is lower than the alpha value of 0.05. From the study by Nguyen & Huynh (2018), they discovered that perceived risk and trust have a big impact on consumers' acceptance on e-payments. In fact, a recent study conducted in Malaysia by Abu Bakar et al (2022) also revealed that the intention to use an e-wallet is influenced by perceived trust.

Lastly, Hypothesis 5 is to examine the relationship between perceived risk and behavioural intention. The result shows the p- value for perceived risk is 0.000 which is lower than the alpha value of 0.05. It is evident that the customers' perceived of risk had an impact on the adoption of e-wallet (Dongsen, 2022). This also was mentioned in a study that the providers must take into account the importance of privacy and security in order to increase e-wallet acceptability (Haque et al., 2020).

Conclusion

In a nutshell, this study has revealed that social influence, perceived usefulness, perceived trust and perceived risk have a significant relationship with behavioural intention to use e-wallet as payment service at retail outlet in rural area. The results are consistent with previous research illustrated a positive correlation between the variables and the behavioural intention. Meanwhile, the social influence has been widely accepted by previous researchers as a crucial factor while determining the adoption intention of technologies similar to the e-wallet (Schierz et al., 2010; Prabhakaran and Sarika, 2020; Tenk et al., 2020). Therefore, social influence (p-value = 0.000) was indicated to have positive influence thus leading to consumer's behavioural intention to use e-wallet services.

Furthermore, perceived risk is found to be the most influence factor to determine the behavioural intention of consumer to use e-wallet services (p-value < 0.05, β = 0.33) and followed by perceived trust that indicated as a second most influence factor (p-value < 0.05, β = 0.32) in the study. According to Xin, 2013, Pham and Ho, 2014, Nguyen & Huynh, 2018, Dongsen, 2022 perceived risk and trust are validated to the previous study as both of them have a significant influence on consumer's behavioural intention to use new mobile technologies. If the consumer perceived e-wallet to be trustworthy and secure, this can motivates them to use it for all their banking transactions, such as transfer of funds, payment of bills, shopping, reloading prepayment and other e-wallet application functions (Haque et al., 2020). So, this study contributes to the ideas for the providers to develop a highly secure system, user-friendly and increase the availability of e-wallet services in order to minimize the risks and maximize the level of trust and then motivates the consumers to use e-wallet at their retail outlet for payment.

Nonetheless, due to the limited number of respondents and the short data collection period, the results cannot be generalized as they do not represent all target group of e-wallet users

in Malaysia. Apart from that, as there were only a few questions and variables, the analysis of the study was limited. Hence, in order to get more meaningful results regarding behavior towards e-wallet, it is recommended that a more in-depth or broader study, targeting a large market should be carried out. The method of focus group interview in several rural areas would be preferable and the factors of motivation should be highlighted for future research. Finally, in order to retain the sustainability of e-wallet in Malaysia, the providers must considerably innovate and improve their services to meet the needs of their users. Consequently, this will encourage more participation by small retailers in utilizing e-wallet services and increase the motivation of users in rural areas to use mobile payments while shopping.

References

- Abu Bakar, A. R., Wan Muhd Rahimi, W. N. A., Adilah Tarmazi, S. A., & Azwa Fudzali, F. (2022). Malaysian Intention to Use e-Wallet: Forthcoming Expectation in Cashless Transactions. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 7(6), e001537. https://doi.org/10.47405/mjssh.v7i6.1537
- 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 and Management*, 7(1). https://doi.org/10.1080/23311975.2020.1804181
- Aji, H. M., Berakon, I., & Riza, A. F. (2020). The effects of subjective norm and knowledge about riba on intention to use e-money in Indonesia. *Journal of Islamic Marketing*, *12*(6), 1180–1196. https://doi.org/10.1108/JIMA-10-2019-0203
- Aydin, G. (2016). Adoption of mobile payment systems: a study on mobile wallets. *Pressacademia*, 5(1), 73–73. https://doi.org/10.17261/pressacademia.2016116555
- Basuki, R., Tarigan, Z. J. H., Siagian, H., Limanta, L. S., Setiawan, D., & Mochtar, J. (2022). The effects of perceived ease of use, usefulness, enjoyment and intention to use online platforms on behavioural intention in online movie watching during the pandemic era. *International Journal of Data and Network Science*, *6*(1), 253–262. https://doi.org/10.5267/J.IJDNS.2021.9.003
- Bernama (2022). PM launches initiative to expand retail digitalisation to rural areas. Retrieved from: https://www.nst.com.my/news/nation/2022/08/826185/pm-launches-initiative-expand-retail-digitalisation-rural-areas.
- Comparehero.my (2022). Ultimate Guide To E-Wallets In Malaysia 2022 Which Should You Get?. Retrieved from: https://www.comparehero.my/e-wallet/articles/best-ewallet-malaysia.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly, 13(3), 319–340. https://doi.org/10.2307/249008

Dongsen, S. (2022). E-Wallet, Convenient or Complicated ?, 01(01), 18-22.

- Dwi Azizah, F., & Nur, A. N. (2021). Technology Acceptance Model in Supporting the Tendency to Use Applications and Impulsive Buying on Purchase Decisions. *Golden Ratio of Mapping Idea and Literature Format*, 2(1), 52–64. https://doi.org/10.52970/grmilf.v2i1.134
- Fakhri, M. M., Fadhilatunisa, D., B, Y., Sari, N. R., & Rosidah. (2022). the Use of the Extended Technology Acceptance Model (Tam) To Measure Behavioural Intention Users of Zahir Accounting Software. Assets : Jurnal Ekonomi, Manajemen Dan Akuntansi, 12(1), 107– 123. https://doi.org/10.24252/assets.v1i1.29048

- Farida, I., & Ardiansyah, W. (2022). Technology Acceptance Model Factors: Implications on Digital-Wallet on Interest to Buy in Franchise Business. Golden Ratio of Marketing and Applied Psychology of Business, 2(2), 147–157. https://doi.org/10.52970/grmapb.v2i2.139
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, Mass.: Addison-Wesley.
- Gefen, D., Karahanna, E. and Straub, D. W. (2003) Trust and TAM in online Shopping: An Integrated Model. Management Information Systems Quarterly.
- Hair, J. Wolfinbarger, M. Money, A. 2011. Essentials of Business Research Methods. 2nd ed. New York: M.E. Sharpe. P34-56.
- Haque, A., Ulfy, M. A., & Hossain, A. (2020). Factors Influencing the Use of E-wallet as a Payment Method among Malaysian Young Adults. *Journal of International Business and Management*, (February). https://doi.org/10.37227/jibm-2020-2-21/
- Hong, I. B., & Cho, H. (2011). The impact of consumer trust on attitudinal loyalty and purchase intentions in B2C e-marketplaces: Intermediary trust vs. seller trust. International Journal of Information Management, 31(5), 469–479. https://doi.org/10.1016/j.ijinfomgt.2011.02.001
- Intarot, Pharot, Beokhaimook, C. (2018). Influencing Factor in E-Wallet Acceptant and Use. International Journal of Business and Administrative Studies, 4(4), 167–175. https://doi.org/10.20469/ijbas.4.10004-4
- Janteng, J., & Dino, N. F. N. (2022). Investigating the Determinants of E-wallet Adoption Intention in Malaysia: An Empirical Study. *International Journal of Academic Research in Business and Social Sciences*, *12*(6). https://doi.org/10.6007/ijarbss/v12-i6/13855
- Khajehshahkoohi, M., Davoodi, S. R., & Shaaban, K. (2022). Factors affecting the behavioural intention of tourists on the use of bike sharing in tourism areas. *Research in Transportation Business and Management*, 43(October 2021), 100742. https://doi.org/10.1016/j.rtbm.2021.100742
- Kurnianingsih, H., Nurain, R., Nurtantiono, A., & Hendratmoko, C. (2022). The Effect of Easy Perception, Benefit Perception, Trust, Experience and Risk on the Decision to Use E-Wallet. *International Journal of Multidisciplinary and Curren*, 4(2), 58–64.
- Liat, C. B., & Shi Wuan, Y. (2014). (For methodology)Factors Influencing Consumers' Online Purchase Intention: A Study among University Students in Malaysia. International Journal of Liberal Arts and Social Science, 2(8), 2307–2924. https://doi.org/10.5539/ass.v10n9p18
- Lim, W. M. (2022). Toward a Theory of Social Influence in the New Normal. *Activities, Adaptation and Aging, 46*(1), 1–8. https://doi.org/10.1080/01924788.2022.2031165
- Mathieson, K. (1991). Predicting User Intentions: Comparing the Technology AcceptanceModel with the Theory of Planned Behavior. Information Systems Research(2:3). pp. 173-191.
- Nguyen, T. D., & Huynh, P. A. (2018). The roles of perceived risk and trust on E-payment adoption. *Studies in Computational Intelligence, 760,* 926–940. https://doi.org/10.1007/978-3-319-73150-6_68
- Olivia, M., & Marchyta, N. K. (2022). The Influence of Perceived Ease of Use and Perceived Usefulness on E-Wallet Continuance Intention. *Jurnal Teknik Industri, 24*(1), 13–22. https://doi.org/10.9744/jti.24.1.13-22
- Parasuraman, A., Zeithamal, V.A. and Malhotra, A. (2005). E-S-QUAL: a multiple-item scale for accessing electronic service quality. *Journal of Service Research*, 7, 213-233.

- Pham, T. T. T., & Ho, J. C. (2014), "What are the core drivers in consumer adoption of NFCbased mobile payment?: A proposed research framework", In Management of Engineering & Technology (PICMET), 2014 Portland International Conference, pp. 3041-3049.
- Prabhakaran, S., & Sarika, P. (2020). Effect of Social Influence on Intention To Use Mobile Wallet With the Mediating Effect of Promotional Benefits, *XII*(Ii), 3003–3019.
- Rajan, K. M., Yadav. (2016). Behavioral intentions to adopt mobile wallets: A developing country's perspective. *Journal of Indian Business Research*, 8(3), 227-244.
- Research and Market (2022). Global Mobile Payment Technologies Market Report 2022: Market Valued at \$86+ Billion in 2022 - Analysis & Forecasts 2016-2021, 2021-2026F, 2031F. Retrieved from: https://www.prnewswire.com/news-releases/global-mobilepayment-technologies-market-report-2022-market-valued-at-86-billion-in-2022--analysis--forecasts-2016-2021-2021-2026f-2031f-301574816.html .
- Riquelme, H. E., & Rios, R. E. (2010). The moderating effect of gender in the adoption of mobile banking. *International Journal of Bank Marketing*, 28(5), 328–341. https://doi.org/10.1108/02652321011064872
- Rosli, M. S., Saleh, N. S., Ali, A., Bakar, S. A., & Tahir, L. M. (2022). A Systematic Review of the Technology Acceptance Model for the Sustainability of Higher Education during the COVID-19 Pandemic and Identified Research Gaps.
- Ringim, K. J., Razalli, M. R., & Hasnan, N. 2012. A Framework of Business Process Reengineering Factors and Organizational Performance of Nigerian Banks. Asian Social Science, 8(4), 203-216
- Schierz P. G., Schilke, O., & Wirtz, B. W. (2010). Understanding consumer acceptance of mobile payment services: An empirical analysis. *Electronic Commerce Research and Applications*. 9(3).209-216.
- Statista (2022). Share of people who made payments through digital wallets in Malaysia from 1st quarter 2019 to 1st quarter 2022. Retrieved from: https://www.statista.com/statistics/1326936/malaysia-rate-of-e-wallet-usage.
- Swilley, E. (2010). Technology rejection: The case of the wallet phone. *Journal of Consumer Marketing*, *27*(4), 304-312.
- Teoh Teng Tenk, M., Yew, H. C., & Heang, L. T. (2020). International Journal of Research in Commerce and Management Studies. *International Journal of Research in Commerce and Management Studies*, *2*(2), 216–233.
- Wardana, A. A., Saputro, E. P., Wahyuddin, M., & Abas, N. I. (2022). The Effect of Convenience, Perceived Ease of Use, and Perceived Usefulness on Intention to Use E-Wallet. Proceedings of the International Conference on Economics and Business Studies (ICOEBS 2022), 655(Icoebs), 386–395. https://doi.org/10.2991/aebmr.k.220602.051
- Wolfinbarger, M. and Gilly, M.C. (2003). eTailQ: dimensionalizing, measuring and predicting etail quality. *Journal of Retailing*, 79, 183-198.
- Wong J. (2022). E-wallet adoption gaining momentum in rural areas. Retrieved from: https://www.freemalaysiatoday.com/category/highlight/2022/08/04/e-walletadoption-gaining-momentum-in-rural-areas/.
- Venkatesh, V., & Davis, F. D. (2009). A theoretical extension of the technology acceptance model; Four longitudinal field studies. *Management Science*, 46(2), 186-204.
- Venkatesh, V., Thong, J., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology, *MIS Quarterly*, 36, 157-178.

- Venkatesh, V., Morris, M, G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified View. *MIS Quarterly*, 27(3), 425-478.
- Xin, H. (2013), "Exploring the influence of trust and culture on mobile payment adoption", Doctoral dissertation, Auckland University of Technology, Auckland.
- Zhang, X., & Yu, X. (2020). The Impact of Perceived Risk on Consumers' Cross-Platform Buying Behaviour. Frontiers in Psychology, 11(October), 1–13. https://doi.org/10.3389/fpsyg.2020.592246
- Oppotus. (2021). Malaysian-e-wallet-usage-towards-recovery-2021. Retrieved from Oppotus: https://www.oppotus.com/