Touch 'n Go eWallet: The New Payment Style When COVID-19 Hits

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ARTICLE INFORMATION

ABSTRACT

Touch 'n Go eWallet is a smartphone application that has recently gained users since the pandemic of COVID-19 hits Malaysia. Touch 'n Go is an e-wallet, an electronic card that can make online payments using a smartphone. It is a secure way to pay using a smartphone because it is convenient to use and reduces physical touch, which can spread diseases and germs to other people. The pandemic and the imposition of Movement Control Orders (MCO) and Home Quarantine have encouraged e-wallet usage, as people will choose cashless payments during that period. This study examines how e-wallets help consumers throughout the COVID-19 pandemic in Malaysia. A total of 150 consumers completed an online survey via Google Forms, and the data were analyzed using SPSS. We found that perceived ease of use and trust impacted consumer satisfaction. This research provides new insights into e-wallet perceptions of Touch 'n Go and how this perception may promote consumer satisfaction.

Keywords: COVID-19, E-Wallet, MCO, Pandemic, Physical Touch, Smartphone, Touch 'n Go

INTRODUCTION

The COVID-19 pandemic insisted the government adopt some needed plans, including the social distancing. It changed the worldview of how humans connect with one another. In our lives before the pandemic, we directly interacted without boundaries. However, as the Covid-19 pandemic hit, human interaction was severely affected. In our economic life, the pandemic, the social distancing, in particular, has also brought a significant effect on the way how we conduct our daily transactions. This constitutes other channels through which our economic interaction could undergo without any obstructions. E-Wallets offer us the solution.

An e-wallet is a service that allows users to store and transfer money, and make payments. These services are often provided by banks, credit card companies, or mobile phone networks. There are many reasons why people might want an e-wallet, including the ability to pay for things online without needing a physical bank card or cash. E-wallets are becoming increasingly popular in recent years as they provide a more convenient way to make online and offline payments. In addition, it avoids physical contact among the users, which guarantees more security from the Covid 19 spread. This accords with WHO's call to use digital money.

Prior to the Covid-19 outbreak, payment using smartphones are popular in the global community (Andrieu, 2001). Several countries such as India, Indonesia, Thailand, Vietnam, and Mexico have already used it (Capgemini, 2019). Besides, governments worldwide responded to creatively be engaged in a cashless society. In Malaysia, there has been a sudden increase in the growth of e-wallets over the last few years. There are currently 53 available services all around the country, taking up 19% of Malaysia's Fintech sector. They are concerned to a great degree as the Bank Negara Malaysia has been formally certified more than 42 e-wallets. Some of them are Alipay, Big Pay, Boost, Grab Pay, MAE, Touch 'n Go e-Wallet, and WeChat Pay MY (Edeh et al., 2021)

Touch 'n Go eWallet is an electronic wallet that is in the form of a mobile application and also a physical card. An electronic wallet (e-wallet) is an electronic card and an application used for online transactions using smart devices such as smartphones and smartwatches. Touch 'n Go eWallet was launched in 1997 and is a key player in Malaysia's progression to a cashless society. Over two decades ago, Touch 'n Go pioneered a digital transformation that has led to Malaysia becoming almost cashless. The project originally began as an initiative to make it easier for commuters to pay their toll but has since blossomed into a Fintech project that is no longer limited by the highways but instead can be used in various locations such as airports and malls.

Today, in this era of advancement of technology and the Internet world, most individuals pay with innovative smart devices. People can use an e-wallet to connect their credit or debit cards to smart devices for payment and transaction activities. The software has been branded as a digital wallet human beings use in their daily business transactions (Uduji, Okolo-Obasi, & Asongu in Kasirye & Masum, 2021). Most people choose e-wallet as a primary way to pay for various reasons which are convenience, user-friendliness, trustworthiness, and security. E-wallet not only provides ease and speed but also comfort and security in transactions (Liébana-Cabanillas et al. in Karim, Haque, Ulfy, Hossain, and Anis, 2020).

In Malaysia, the growth of using an e-wallet as a form of payment is growing tremendously because of the recent pandemic of COVID-19. The Malaysian government has enhanced Malaysians to adopt the cashless economy to reduce the spread of COVID-19 through physical touch. The government has also made initiatives by giving money to young generations aged between 18-20 and those who are still studying in

higher education through programs named e-Belia in 2021 and e-Penjana in 2022 through the e-Wallet payment. According to Schierz, Schilke, & Wirtz (2010), only one percent of mobile phone users have used a mobile payment system. These initiatives were made for Malaysians to get used to paying using an e-Wallet.

LITERATURE REVIEW

Familiarity

Familiarity with some products is one of the main keys to the success of the product. Familiarity can be defined as a thorough understanding of something or either the fact a person is so familiar with it. "In e-wallet context, familiarity relates to the degree to which a customer gets acquainted with payment method including making a payment or the popularity of the payment system in daily life" (Phuong, Luan, Dong, & Khanh, 2020). The familiarity of the e-wallet can be caused by many reasons since nowadays the e-wallet is getting more popular. The familiarity of the Touch 'n Go eWallet among people had shifted the physical payment method into cashless payment during the Covid-19 pandemic since physical and social distancing existed to prevent the spreading of the virus through the physical transaction of money (Kee et al., 2021). Familiarity with e-wallets among people is important since it is a way to attract people to use it.

Meanwhile, in Malaysia e-wallet are commonly familiar among the young generation which has been concerned by some researchers regarding the implementation of e-wallets. In Indonesia, Sentiyono (2020) concluded that the Indonesian people are actually familiar with transfer payment via e-wallet or m-banking. However, in Bangladesh, the e-wallet is not familiar like other developed countries (Neger & Uddin, 2020). It shows that not many countries have developed E-wallets in their countries unless some of them.

Basically, the higher degree of user familiarity has an impact on users' perceived use and perceived usefulness (Choi, 2020). Moreover, promoting customers' familiarity also will increase the perceived use and perceived usefulness of the e-wallet (Phuong et al., 2020). According to Prasasti, Aulisaina, and Hakim (2021), familiarity with the platform and features of an e-wallet can strengthen the users' loyalty to their favorite platform. Nevertheless, the outlook for familiarity with e-wallet remains strong because of the increased e-commerce popularity in recent years (Alam, Awawdeh, & Muhamad, 2021). In addition, if the user is familiar with e-Wallet, the social influence impact on the user's behavior toward the e-wallet can be eliminated (Nawi, Mamun, Hayat, & Seduram, 2022). Consumers will become more comfortable with the process as they become more familiar with e-wallets and the need for additional details and inappropriate conduct will be significantly reduced. The app familiarity can help reduce the anxiety of people using the apps (Soon, Gengeswari, & Chin, 2022) and can reduce the reluctance to adopt (Kaur, Dhir, Talwar, & Ghuman, 2021). Furthermore, purposive sampling was used in one research where the main focus was only on people that are familiar with e-wallet services (Shane, Chan, & Mohan, 2022). Here, we will see whether the familiarity of E-wallets has an impact on consumer satisfaction with Touch 'n Go eWallet during the Covid-19 pandemic.

Usefulness

According to IGI Global, the extent to which e-Wallets are beneficial to assist users in facilitating specific activities. According to Yang, Mamun, Mohiuddin, Nawi, and Zainol, (2021), perceived ease or usefulness is a significant aspect that influences the intention and acceptance of e-wallet services and has been shown to have a significantly positive effect. Kaur et al. (2021) investigated perceived usefulness as a predictor of eWallet application satisfaction.

Karim et al. (2020) used an expanded TAM to evaluate the variables that influence the use of eWallets among Malaysian youths. They highlighted that perceived utility, perceived ease of use, privacy, and security had a considerable positive influence on behavioral intention to use an eWallet. Soodan and Rana (2020) studied the factors influencing the adoption of eWallet. Meanwhile, Subaramaniam et al. in Amalina and Suhaimi (2021) observed a very comparable distribution of 40% of respondents preferring paying with cash (36.7%) or eWallets with 38.9%. The 20% opted to pay with debit or credit cards. As a result, the majority of young respondents use e-Wallets and enjoy the ease and advantages they offer, such as rebates, free items, and discounts. Therefore, it is expected that consumer use of eWallets will result in future intentions to continue utilizing e-Wallets (Pal & Bharada, 2020).

The pandemic has had a substantial impact on the Malaysian economy, with layoffs and new graduates unable to look for jobs (Edeh et al., 2021). eWallets are applications designed by authorized banks (or licensed as providers of non-bank E-money) that convert physical wallets into digital features (Singh & Sinha, 2020). Puriwat and Tripopsakul in Ojo, Fawehinmi, Ojo, Arasanmi, and Tan (2022), discovered that the perceived seriousness of COVID-19 affects a person's decision to continue utilizing cashless payment technology since cash places a higher chance of virus infection. Furthermore, such apprehension translates into situations in which people avoid physical transactions because they fear engaging with virally tainted cash (Wisniewski, Polasik, Kotkowski, & Moro, 2021). Perceived Government Support indicates the public's belief that the government fully supports using eWallets to minimize physical interactions between consumers and companies (Aji et al., 2020). People may instead opt for eWallets as a result.

Nevertheless, the features provided by e-wallet services have made it an alternate means for simple transactions, since payments may be done without any constraints using a smartphone. E-wallets' superior technology benefits users by making financial services more accessible. As a result, the research emphasis has switched to researching the hurdles to eWallet adoption (Kaur et at.,2020; Ojo et al., 2022). To be more detailed, eWallet consumers said it was easy to understand, straightforward, and user-friendly, leaving an appealing impression and having an impact on their fulfillment (Nadhira, in Kee et al., 2022). Consequently, Tang et al., (2021) agreed that perceived trust is a strong predictor of m-payment adoption intentions. Several prior studies have also revealed that perceived trust has a significant relation with the behavioral intention to use e-wallets among smartphone owners (Chresentia & Suharto, 2020). As a result, trust is an important critical component in increasing the desire to continue usage and engaging consumers to carry out e-wallet services.

Besides that, e-wallets are password encrypted. e-Wallets may be used to pay for groceries, internet purchases, and flights and hotels, among other things (Indiatimes, 2022). Touch' n Go provides the greatest level of protection to their customers' money and financial information, successfully acquiring the customer's perceived trustworthiness (Kee et al., 2022). This corroborates previous studies, contending that consumers feel safe adopting e-Wallets since they believe the government is highly supportive (Ojo et al., 2022). As a result, contactless payments have become a special sensation to develop in the future. Malaysians, in particular, will thoroughly enjoy how effortlessly Touch' n Go can be managed (Kee et al., 2022).

User Satisfaction
According to IGI Global, user satisfaction can be defined as the user's comfort and acceptance of an application throughout the process of material consumption and engagement with the system. User satisfaction is something that needs to be emphasized because it influences the development of an application, whether customers

will remain loyal or make a variety of complaints, and it will be used as a benchmark to make decisions in the future.

The consumer is going to be absolutely delighted with the convenience that an e-wallet provides for them. The usage of e-wallets is frequently considered to be risk-free because the programs that power them ensure the data's confidentiality and encrypt it. Touch 'n Go is one of the e-wallet applications available in Malaysia that has one of the highest levels of security, and consumers reported feeling at ease when using it. Other e-wallet applications available in Malaysia include WeChat Pay My, AliPay, Boost, and MAE by Maybank (Kee et al., 2022). Customer satisfaction and customer trust positively affect customer continuance intention. Also, customer trust is tested to substantially mediate the relationship between customer satisfaction and customer continuance intention (Phuong et al., 2020). Nadhira (2021) concluded that ease of use positively affects customer satisfaction. This indicates that customers have a genuine desire for user-friendly, well-designed, and easy-to-use e-wallets, as well as one that allows them to rapidly obtain the information they require.

Touch 'n Go Group reportedly formed a business concern with the Ministry of Finance (MoF) and the Malaysia Digital Economy Corporation (MDEC) on July 2, 2021, as reported by the News Straits Times. This partnership is intended to drive the 2021 Budget initiatives, such as cashback, coupons, and incentives. In addition to supporting local businesses. This campaign attempted to encourage people to make purchases online. It indicates that the goal of this campaign is to encourage small businesses located throughout Malaysia to use e-commerce and e-payment platforms by way of Touch 'n Go. This measure is taken to improve the overall level of customer satisfaction that users of the Touch 'n Go e-wallet report experiencing.

RESEARCH METHOD

This study used a sample size of one hundred fifty persons, all of whom were located in Malaysia and randomly chosen. To collect the information required for this study, questionnaires were drafted on Google Forms and sent via various social media, such as Instagram, Facebook, Telegram, and WhatsApp,

This questionnaire can be completed online in one of four different sections. The first section is titled "Demographic Characteristics". The second section is titled "Familiarity to Touch n 'Go e-Wallet". The third section is titled "Usefulness of Touch' n Go e-wallet during Pandemic COVID-19". The final section is titled "User Satisfaction of Using Touch 'n Go e-Wallet."

From the 28th of April through the 13th of May 2022, we diligently collected each of the 150 responses. After we had collected all of the data sets, the questionnaire was closed by our team, and we were no longer able to receive additional respondents. After that, we got to work compiling the results of the questionnaire into Excel and feeding them into version 26 of IBM SPSS Statistics.

RESULTS

From the responses collected for the study, the demographic characteristics were analyzed. As for this study, 150 valid data were analyzed. Table 1 shows the demographic of the respondent characteristics. For this study, the total numbers of male respondents were 54, representing 36% of the total responses. While females represent 64% which is more than the male respondents.

Moreover, most respondents are aged between 18-24 years old and represent 71.3% of the total responses. The most minor responses of about 2.0% of respondents aged 60 years and above. The living areas were also recorded in which the respondents from towns were at the top comprising 45.3%, and from cities and rural were 44.0% and 10.7% respectively. Furthermore, the occupation of the respondents has also been considered, in which the maximum number of respondents were students representing 69.3% of total responses, followed by the unemployed respondents representing 20.7%.

Table 1. Respondent Demographic Characteristics

Measure	Items	Frequency	Percentage
Gender	Male	54	36.0
	Female	96	64.0
Age	Below than 18 years old	4	2.7
	18 - 24 years old	107	71.3
	25 - 34 years old	12	8.0
	35 - 44 years old	8	5.3
	45 - 54 years old	12	8.0
	55 - 59 years old	4	2.7
	60 years and above	3	2.0
Living Area	City	66	44.0
	Town	68	45.3
	Rural	16	10.7
Occupation	Student	104	69.3
	Self-employed	9	6.0
	Unemployed	31	20.7
	Retired	5	3.3
	Housewife	1	0.7

Familiarity with Touch 'n Go
To study the familiarity of the Touch 'n Go, the questionnaire included the question regarding the familiarity with the Touch 'n Go. The responses are structured and compiled as shown in Table 2. From the studies, a total of 148 respondents were aware, representing 98.7% of the total respondents. Of the total respondents, 93.3% of respondents used this e-wallet before. Further, 50.7% and 43.3% of respondents used this e-wallet before and during the COVID-19 pandemic.

Moreover, the frequency of use of this e-wallet was studied, representing about 36.0% of respondents using this e-wallet monthly, followed by 22% weekly. Further, 13.3% of total respondents use it daily, and only 5% to 6% of respondents never used it. This familiarity result points toward respondents' positive perspective towards Touch 'n Go e-Wallet.

Table 2. Familiarity with Touch 'n Go e-Wallet

Questions	Options	Frequency	Percentage
Have you heard about Touch 'n Go e-wallet before?	Yes	148	98.7
	No	2	1.3

Have you used the Touch 'n Go e-wallet before?	Yes	140	93.3
	No	10	6.7
If yes, when do you start using Touch 'n Go e-Wallet?	Before COVID-19	76	50.7
	During COVID-19	65	43.3
	Never	9	6.0
How often do you use Touch 'n Go e-Wallet?	Never	8	5.3
	Only used once	20	13.3
	Daily	20	13.3
	Weekly	33	22.0
	Monthly	54	36.0
	Annually	15	10.0

DISCUSSION

The Usefulness of Touch 'n Go e-wallet During Pandemic COVID-19
To study the usefulness of Touch 'n Go e-wallet during Pandemic COVID-19, the 150 responses collected were analyzed using descriptive statistics. The questions in these sections were provided with options ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Descriptive statistics for the usefulness of this e-wallet reveal an overall mean score of 4.3381 *(SD = 0.55966)*. This represents the respondents' positive perception of the Usefulness of Touch 'n Go e-Wallet. During the COVID-19 pandemic, this e-wallet has significantly reduced the physical touch while making payments which can be referred to by the maximum mean score of about 4.57 (see Table 3). This e-wallet has also impacted life, representing a mean score of about 4.35.

Table 3. Descriptive Statistics for the Usefulness of Touch 'n Go e-wallet During Pandemic COVID-19

Questions	Minimum	Maximum	Mean	Std. Deviation
Touch 'n Go e-wallet is safe and secure.	2	5	4.24	0.766
Touch 'n Go e-wallet is convenient and user-friendly.	2	5	4.28	0.734
Touch 'n Go e-wallet reduces physical touch while doing the payment.	1	5	4.57	0.689
Touch 'n Go e-wallet is a trustworthy application.	2	5	4.29	0.710
Touch 'n Go e-wallet saves my time.	1	5	4.31	0.859

Touch 'n Go e-wallet is easy to maintain transaction history.	2	5	4.33	0.766
Touch 'n Go e-wallet makes my life easier.	1	5	4.35	0.859

User Satisfaction of Using Touch 'n Go e-Wallet

The user satisfaction with Touch 'n Go e-wallet was studied using descriptive statistics on the 150 responses collected. The questions in this section were provided with options ranging from 1 (very unlikely) to 5 (very likely). Descriptive statistics of user satisfaction with using Touch 'n Go e-wallet showcased the overall mean score of 4.1667 (SD = 0.7236). This obtained results inclined towards maximum user satisfaction. The top mean score of 4.48 represents that the respondents expect more upgraded features from the Touch 'n Go e-Wallet. This was followed by recommending others to use this e-wallet, representing a mean score of 4.31 (see Table 4).

Table 4. Descriptive Statistics for User Satisfaction of Using Touch 'n Go e-Wallet

Questions	Minimum	Maximum	Mean	Std.Deviation
Are you happy using Touch 'n Go e-Wallet?	1	5	4.26	0.806
Are you comfortable using Touch 'n Go e-Wallet?	1	5	4.19	0.872
Are you satisfied with the Touch 'n Go e-wallet application?	1	5	4.16	0.898
Will you be loyal to using Touch 'n Go e-wallet in the future?	1	5	3.93	0.988
Do you get any cashback, discounts, coupons, or special offers?	1	5	3.83	1.241
Do you think Touch 'n Go e-wallet can upgrade its features more in the future?	1	5	4.48	0.721
Do you recommend to others to use Touch 'n Go e-Wallet?	1	5	4.31	0.860

CONCLUSION

During the Covid 19 pandemic, we all started using online apps for making day-to-day transactions. We did research on a Malaysian e-wallet named Touch 'n Go. It is a secure way to pay using a mobile smartphone because it is convenient to use and reduces physical touch, which can spread diseases and germs to other people. Touch 'n Go eWallet is the most used e-wallet by Malaysian people. Touch 'n Go eWallet attracts customers with its all-in-one feature; customers find everything on one platform.

A total of 150 consumers completed an online survey via Google Forms, and the data were analyzed using SPSS. We derived the data that a total of 148 respondents were familiar with the Touch n' Go e-wallet representing 98.7%. We found the descriptive

statistics for the usefulness of this e-wallet reveal an overall mean score of 4.3381 (SD = 0.55966). Using Touch 'n Go e-wallet showcased the overall mean score of 4.1667. Even users are expecting more upgraded features from Touch 'n Go e-wallet.

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DECLARATION OF CONFLICTING INTERESTS

REFERENCES

Alam, M. M., Awawdeh, A. E., & Muhamad, A. I. (2021). Using e-wallet for business process development: Challenges and prospects in Malaysia. *Business Process Management Journal*, *27*(4), 1142-1162. doi:10.1108/BPMJ-11-2020-0528

Amalina, N., & Suhaimi, N. A. D. (2021). Preliminary study on the perception of e-wallets usage by Malaysian online users. *International Journal of Business and Technopreneurship, 11*(1), 41-50.

Andrieu, M. (2001). The future of e-money: An internatioal review of policy and regulatory issues. *The Journal of Futures Studies, Strategic Thinking and Policy, 3*(6), 502-522. doi:10.1108/14636680110420459

Capgemini. (2019). *World payment report 2019.* Retrieved April 2, 2020, from https://worldpaymentsreport.com/wpcontent/uploads/sites/5/2019/09/World-Payments- Report-WPR-2019.pdf.

Choi, J-C. (2020, November 6). user familiarity and satisfaction with food delivery mobile apps. *SAGE Open, 10*(4), 1-10. doi:10.1177%2F2158244020970563

Chresentia, S., & Suharto, Y. (2020). Assessing consumer adoption model on e-wallet: An extended UTAUT2 approach. *International Journal of Economics, Business and Management Research, 4*(6), 232–244.

Edeh, F. O., Aryani, D. N., Subramaniam, T. A., Kee, D. M., Samarth, T., Nair, R. K., Kannappan, T. A., Tan, Y. S., & Teh, Y. C. (2021). Impact of COVID-19 pandemic on consumer behavior towards the intention to use E-wallet in Malaysia. *International Journal of Accounting & Finance in Asia Pasific*, *4*(3), 42-59. doi:10.32535/ijafap.v4i3.1205

Indiatimes. (2022). *What is E-wallets? Definition of e-wallets, e-wallets meaning.* Retrieved from https://economictimes.indiatimes.com/definition/e-wallets

Kasirye, F., & Masum, S. (2021). *The effects of e-Wallet among various types of users in Malaysia: A comparative study.* Paper presented at 3rd Kuala Lumpur International Conference on Education, Economics and Technology (KLICEET2021)

Kaur, P., Dhir, A., Talwar, S., & Ghuman, K. (2021). The value proposition of food delivery apps from the perspective of theory of consumption value. *International Journal of Contemporary Hospitality Management*, *33*(4), 1129-1159.

Kee, D. M. H., Nor Hisam, N. N., Abd Rashid, N. H., Abdul Aziz, N. S., Mazlan, N. A., & Mahadi, N. A. Z. (2021). The impact of using cashless payment during the Covid-19 pandemic: A case study of Maybank. *International Journal of Accounting & Finance in Asia Pacific*, *4*(2), 107-117. doi:10.32535/ijafap.v4i2.1118

Kee, D. M., Ow, A. L., Ooi, Z. J., Sathiaseelan, P., Pang, K., KA, S., & Madhan, S. (2022). *Have you touched? A case study of Touch n Go eWallet. International Journal of Accounting & Finance in Asia Pasific, 5*(1), 84-94.

Karim, W. M., Haque, A., Ulfy, M. A., Hossain, M. A., & Anis, M. Z. (2020). Factors influencing the use of E-wallet as a payment method among Malaysian young adults. *Journal of International Business and Management, 3*(2), 1-11. doi:10.37227/jibm-2020-2-21/

Nadhira, A. F. (2021). *Analysis of factors affecting customer satisfaction: Study on e-wallet services.* Retrieved from https://eprints.ums.ac.id/92520/11/NASKAH%20PUBLIKASI.pdf

Nawi, N. C., Mamun, A. A., Hayat, N., & Seduram, L. (2022). Promoting sustainable financial services through the adoption of eWallet among Malaysian working adults. *SAGE Open, 12*(1). 1-15. doi:10.1177%2F21582440211071107

Neger, M., & Uddin, B. (2020). Factors affecting consumers' internet shopping behavior during the COVID-19 pandemic: Evidence from Bangladesh. *Chinese Business Review, 19*(3), 91-104. doi:10.17265/1537-1506/2020.03.003

Ojo, A. O., Fawehinmi, O., Ojo, O. T., Arasanmi, C., & Tan, C. N-L. (2022). Consumer usage intention of electronic wallets during the COVID-19 pandemic in Malaysia. *Cogent Business & Management, 9*(1), 2056964. doi:10.1080/23311975.2022.2056964

Pal, R., & Bhadada, S. K. (2020). Cash, currency and COVID-19. *Postgraduate Medical Journal, 96*(1137), 427-428.

Phuong, N. N. D., Luan, L. T., Dong, V. V., & Khanh, N. L. N. (2020). Examining customers' continuance intentions towards e-wallet usage: The emergence of mobile payment acceptance in Vietnam. *Journal of Asian Finance, Economics and Business, 7*(9), 505-516. doi:10.13106/jafeb.2020.vol7.no9.505

Prasasti, A., Aulisaina, F. I., & Hakim, M. A. R. (2021). Does discount matter in Indonesia e-Wallet race: A Generation Z e-Wallet preferences during pandemics. *The Winners, 22*(1), 57-65. doi:10.21512/tw.v22i1.7019

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.

Shane, J. M. S. S., Chan, T. J., & Mohan, Y. M. (2022). Factors affecting the intention to adopt e-wallet services during Covid-19 pandemic. *Journal of Arts & Social Sciences, 4*(2), 28-40.

Singh, N., & Sinha, N. (2020). How perceived trust mediates merchant's intention to use a mobile wallet technology. *Journal of Retailing and Consumer Services, 52*, 101894. doi:10.1016/j.jretconser.2019.101894

Soon, W. L., Gengeswari, K., & Chin, K. S. (2022). A peek at the food delivery application adoption reluctance among Generation Y in Malaysia. *Journal of Positive School Psychology, 6*(3), 7018-7031.

Tang, Z., Zhou, Z., Xu, F., & Warkentin, M. (2021). Apps within apps: Predicting government wechat mini-program adoption from trust–risk perspective and innovation diffusion theory. *Information Technology and People, 35,* 1170-1190.

Wisniewski, T.P., Polasik, M., Kotkowski, R., & Moro, A., 2021. Switching from cash to cashless payments during the COVID-19 pandemic and beyond (No. 337). *NBP Working Papers.*

Yang, M., Mamun, A. A., Mohiuddin, M., Nawi, N. C., & Zainol, N. R. (2021). Cashless transactions: A study on intention and adoption of E-Wallets. *Sustainability, 13*(2), 831. doi:10.3390/su13020831