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Do You Have a Digital Wallet? A Study of E-Wallet during the COVID-19 Pandemic

Daisy Mui Hung Kee[1], Kah Huey Lai[2], Jia Ching Lee[3], Khang Jie Lee[4], Jia Long Lee[5], Idderena Yosanti[6], Dwi Nita Aryani[7]
Universiti Sains Malaysia[1,2,3,4,5]
Jalan Sg Dua, 11800 Minden, Pulau Pinang, Malaysia
Malangkucecwara School of Economics[6,7]
Kota Malang, Jawa Timur 65142, Indonesia
Correspondence Email: daisy@usm.my
ORCID ID: https://orcid.org/0000-0002-7748-8230

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ABSTRACT

Following World Health Organization (WHO) recommendation, government officials are taking measures to facilitate non-contact payments that allow consumers to conduct contactless transactions, use cashless payment methods, and distance themselves physically from ATMs after the Corona Virus Disease 2019 (COVID-19) outbreak. COVID-19 is prevented from spreading through social distancing enabled by e-Wallets. Consequently, e-Wallets are becoming more popular to facilitate smoother, more efficient online transactions. We aim to investigate the key factors to use an e-Wallet since this COVID-19. The four factors included in the research are perceived risk, perceived ease of use, perceived convenience, and government support. Data from this study were collected through electronic questionnaires. The online survey received a total of 100 respondents who are e-Wallet users. Our findings disclosed that perceived risk, perceived ease of use, and perceived convenience are associated with intentions to use e-Wallets. The results offer useful insight into the field of e-Wallets.

Keywords*:* Covid-19, E-Wallet, Perceived Convenience, Perceived Ease of Use, Perceived Risk of Covid-19, Intention to use

JEL Classification: F30, M00, M20

INTRODUCTION

The outbreak of Covid-19 shocked the world. Due to the high infection and fatality rates, most countries have implemented corresponding policies to prevent the spread of the virus. Thus, this pandemic has impacted the survival and sustainability of many businesses, in particular small and medium-sized enterprises (SMEs) (Hu & Kee 2021a; 2021b). Many SMEs and service industries were hit hard in Malaysia when the Malaysian government began implementing Movement Control Order (MCO) in March 2020 (Alfrina, 2021). The pandemic acts like a two-edged sword that provides opportunities for some businesses to improve their business achievement (Kee et al., 2021) and entrepreneurial opportunity identification (Tunde, Kee, Ayodele, Lukman, & Abiodun, 2021). As a result of the pandemic, mental health and well-being were also compromised (Anwar, Kee, Salman, & Jabeen, 2021). The closure of schools and universities has forced students to attend online learning (Munir, Anwar, & Kee, 2021). During the MCOs, many people were required to stay at home; thus, a digital wallet became popular.

E-wallet is a device that can make online transactions via a computer or smartphone. It operates much like the use of credit or debit cards. Cashless transactions, also known as virtual currency, are a recent technological revolution that has gained tremendous traction in recent years (Pachpande & Kamble, 2018) and have become popular in many countries (Upadhayaya, 2012). Nowadays, the outbreak of Covid-19 has pushed e-Wallets to the peak to create a cashless society. In an empirical finding, among 100 respondents in Malaysia, 64% stated that they started using e-Wallets after the Covid-19 outbreak (Edeh et al., 2021). According to the World Health Organization (WHO) (n.d), coronavirus infection is primarily through droplets. In this regard, the physical cash that most people encounter every day will become a vector that cannot be underestimated. Therefore, the WHO encourages people to use cashless payments to block the spread of the virus (Huang, 2020).

Governments of various countries have also begun to respond to creating a cashless society, including Malaysia actively. In this regard, the best way is through the e-Wallet industry due to its popularity. In Malaysia, there are many popular e-Wallets, among which the three most famous are Touch ‘n Go, Boost, and Grabpay. Therefore, the Malaysian government launched ePENJANA in the Short-Term Economic Recovery Plan (Penjana). The purpose of ePENJANA is to encourage people to realize contactless payment. In ePENJANA, the government offers RM50 ePENJANA credits, which can be used to make purchases using selected e-Wallets, Boost, GrabPay, and Touch ‘n Go eWallet (Ministry of Finance Malaysia, 2020). This policy has undoubtedly become the driving force for everyone to use e-Wallets.

In addition to government support to promote the e-Wallet industry, many other factors have also contributed to its rise. Previous research has shown that people's willingness to use e-Wallet is linked to their practicality, simplicity, and security (Karim, Haque, Ulfy, Hossain, & Anis, 2020). However, some people still have concerns about this new technology. Previous studies have shown that the e-Wallet industry faces many barriers, including value barriers, usage barriers, risk barriers, and cost barriers (Anuar et al., 2020). Therefore, the development of electronic wallets remains incomprehensive, leading to the opponents of this practical technology.

Although there have been many studies on people's willingness to use e-Wallets, research on people's willingness to use e-Wallets after the Covid-19 outbreak is still infrequent. This study is therefore looking at Malaysian’s willingness to adopt the use of e-Wallets during this epidemic. In this way, we can clearly understand whether this epidemic has brought a good opportunity to the e-Wallet industry.

LITERATURE REVIEW

Perceived Risk

Risk is the potential or possibility of anything unpleasant happening ("Risk", n.d.). Aside from the risk, there are additional implications to consider, such as social and physical danger, financial loss, and time loss (Cunningham, 1967). Raymond Bauer introduced the concept of perceived risk to consumer research in 1960. This phrase refers to the idea that all endeavor entails some level of risk. The two most important dimensions of risk are those connected to uncertainty and the severity or impact of loss. According to Bauer (1960), the customer is driven to deal with uncertainty and choose a course of action to minimize perceived risk.

Covid-19 is one of the characteristics that determine customer perceptions of e-Wallet risk, according to our findings. According to the World Health Organization, Covid-19 is an infectious disease caused by the SARA-CoV-2 virus that spreads by sneezing, inhaling, coughing, or talking. The World Health Organization (WHO) encourages the customer to engage in non-contact activities such as financial transactions. There has been an increase in the use of e-Wallet because people are concerned that Covid-19 can be communicated through physical cash, which has prompted them to switch to e-Wallets (Aji, Berakon, & Husin, 2020). As a result, consumers' perceptions of Covid-19 risk increase, and they are beginning to use e-Wallets.

Perceived Ease of Use

In Technology Acceptance Model (TAM) modeling, one of the two primary elements is perceived ease of use, which is described as "the extent to which a person believes that using a specific technology will be free of effort" (Davis, 1989). It has been used as a variable in population research and a significant determinant in people's attitudes regarding mobile payment systems (Phonthanukitithaworn, Sellitto, & Fong, 2016). Perceived use may relate to a situation in which consumers assume that using the system will involve no mental or physical effort (Mun, Khalid, & Nadarajah, 2017).

Consumer attitudes about online purchasing are heavily influenced by perceptions of how simple transactions are to complete (Jackson, Chow, & Leitch,1997). The perceived ease of use influences intentions and behavior to use technology positively and significantly. This concept is used in this study to relate to the general societal opinion on the use of e-Wallets and how it might improve their mobile payment experiences and effectiveness (Vijayasarathy, 2004).

Another study found that users' opinions on mobile banking services were positively influenced by their perceptions of their ease of use (Rahi, Khan, & Alghizzawi, 2020). Digitalization has had a significant role in consumer behavior, resulting in new modes of living. As a result of the increase in internet-based services, the growth of service providers, as well as the expansion of their network, electronic banking has gained credibility (Li, Mirosa, & Bremer, 2020). When it comes to international and money transactions, the growth of digitization through the Internet has sped up the transition from manual to online transactions. As a result, people are increasingly completing transactions with electronic money (e-money).

Perceived Convenience

The primary motivator for offline and online consumption is perceived convenience (Ozturk, Bilgihan, Nusair, & Okumus, 2016). To make life simpler, technology is primarily developed for convenience. It has been demonstrated that customer evaluations of the usefulness of technology are essential. In self-determination theory, convenience refers to users' beliefs that technology will enable them to accomplish their tasks. Besides that,

one of the most important reasons for technology's acceptance is its interactive and transactional capabilities (Chang, Yan, & Tseng, 2012). The ease of handling and quickly accessible nature of smartphones have been featured as two significant advantages that users will likely derive from these technological advancements (Okazaki & Mendez, 2013). Besides, according to Roy, Shekhar, Lassar, and Chen (2018), convenience applies to how much time and effort is saved when consumers engage in a product or service. It also accessibility implies that the product or service is available at a particular time, place and can be acquired and used at any time.

Government Support

The government is a collection of people given the authority to govern a county or state. Subsidies or limits imposed by the government to improve or slow the development of a particular industry through cash payments, tax reductions, and other means are examples of government support. The government is developing electronic payments to enable the implementation of a cashless ecosystem through the use of Automated Teller Machines (ATMs), mobile payments (e-Wallet), online banking, and government payments (MyGovernment, n.d.). The key reason for the government's decision to push e-Wallets is that Malaysia's economy has been weakening since Covid-19, as people's earnings and spending have decreased. Pemerkasa is giving students or young adults in higher education aged 18 to 20 the option to obtain an RM150 credit through eWallets such as Touch n Go, Boost, and ShopeePay (Povera & Harun, 2021). This chance highly will support local businesses and encourage traders to use e-Wallets.

Intention to Use an E-Wallet

The desire to perform an action or a motivating element that reflects how much effort a person is expected to accomplish that behavior is referred to as a person's intention (Ajzen, 1991). Positive or negative thoughts and emotions can encourage a human personality or activity (Ajzen, 1991). It is a psychological expression that refers to a promise to perform an action or series of tasks in the future. It can include mental exercises, arranging activities, and planning. It displays logical decision-making on a specific action or outcome and the desired results or protest. Behavioral intention refers to an individual's perception of participating in a particular conduct's possibility or probability value (Peter & Olson, 1999).

The intensity of people’s desire to purchase products is measured by their intention to use e-Wallet (Fishbein & Ajzen, 2011). Behavioral intentions toward technology acceptance can be measured using the same characteristics that determine e-Wallet intention, such as perceived risk, ease of use, perceived convenience, and government support. Both internally and externally, the pandemic's connectivity restrictions affected customers' use of contactless transfer of funds and their opinions of the benefits of utilizing this payment option during the epidemic (Zhao & Bacao's, 2021).

Relationship between Perceived Risk of Covid-19 and Intention to Use an E-Wallet

The Covid-19 pandemic has resulted in behavioral changes to protect personal safety, which aids in preventing the Covid-19 spread. According to Covid-19 reports, the possibility of the virus spreading via surfaces, including physical cash, raises customer awareness of the disease's seriousness, with the use of physical cash makes it possible to contract the virus. As a result, they believe that e-Wallets can promote protective health behavior and enhance the intention to use e-Wallets to lower the risk of Covid-19 (Daragmeh, Sagi, & Zéman, 2021). According to The Malaysian Reserve, the Covid-19 has caused a more than 80% increase in e-Wallet usage in Malaysia over the last 18 months since the limited movement started pushing cashless payments among Malaysians. Malaysia's Finance Minister, Datuk Seri Zafrul Tengku Abdul Aziz, reported that e-Wallet transactions have increased by 89 percent (468 million) from one year to

June 2021. The findings clearly show that those who suspected cash posed a considerably large risk of viral transmission chose cashless alternatives. Payment behavior had also been indirectly transformed due to the pandemic's influence on the trends of our daily activities (Wisniewski, Polasik, Kotkowski, & Moro, 2021). This suggests the following hypothesis.
H1: Perceived risk of Covid-19 is positively related to intention to use.

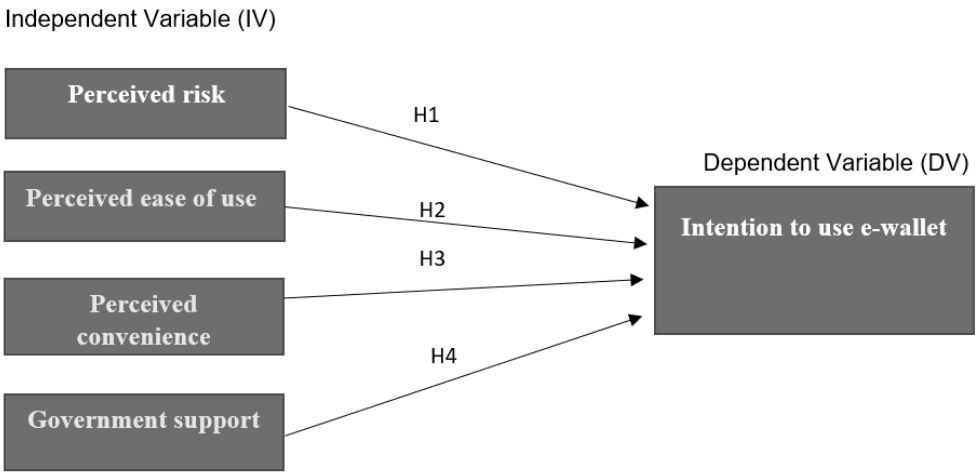
Relationship between Perceived Ease of Use and Intention to Use an E-Wallet
User attitudes towards and intentions to use technology directly correlate with perceived ease of use (Chawla & Joshi, 2020). Their perception of ease of use highly influences consumers' purchasing decisions. Therefore, a consumer's perceived ease of use when using an e-Wallet may influence their previous purchasing history. Many consumers expressed satisfaction with their e-Wallet app's ease of use (Hamid, Razak, Abu Bakar, & Abdullah, 2016). As a result, perceived ease of use relates to the simplicity with which technology will connect with the Internet and execute an online transaction (Grover, Kar, Janssen, & Ilavarasan, 2019). Consumers that use technology to complete payments will find it more profitable to do so. In other words, the more easily technology can be applied, the more likely it is for consumers to adopt that technology as their mode of payment for transactions. Following the discussion, the following hypothesis can be formulated.
H2: Perceived ease of use is positively related to intention to use.

Relationship between Perceived Convenience and Intention to Use an E-Wallet
Liu and Li (2019) examined the relationship between consumers' convenience perception and their adoption of new technologies. According to Xu, Huang, and Li (2019), perceived convenience was one factor that influenced consumers' decisions in favor of mobile payment over credit card payments. Besides, consumers in Generation Z are realistic and quick to adopt new technologies (Ozkan, & Solmaz, 2015). Therefore, testing the perceived convenience factor of e-wallets during the Covid-19 pandemic is our third hypotheses.
H3: Perceived convenience is positively related to intention to use.

Relationship between Government Support and Intention to Use an E-Wallet
Customers expected higher service quality and innovation levels as regulatory oversight and expertise increased (Quach, Thaichon, & Hewege, 2020). Providing government support to a business can reduce the price of a product or a service by reducing taxes or paying for the cost a client would shell out on excellent service. When the government stepped in, it created a win-win situation for suppliers and customers. Consumers will pay a lower price because the suppliers will not have to charge outrageous charges. Consumer will pay a higher price for a product (Tarver, 2021). Changes in consumer confidence lead to increases in private and government spending and tax income and interest payments. Private consumption impacts tax revenue, while government support has an impact on interest rates. Government investment or support has had a greater impact on the market than private consumption (Yasemin & Sadullah, 2010). Teenagers and students at higher learning institutes use the government's eBelia credit in their e-wallet to buy essentials and study equipment online (The Star, 2021). Therefore, we hypothesize:
H4: Government support is positively related to intention to use.

Following the discussion, Figure 1 illustrates our research framework

Figure 1. Research Model



RESEARCH METHOD

A Google form application is used in this study to gather data from the respondents through an online questionnaire. It was decided that 100 respondents would be the appropriate sample size for the current study because a larger sample size will improve statistical power in this circumstance while performing statistical analysis on the data. The online questionnaire was used to gather the information in this study, which was conducted using a Google Form. Based on the data analysis carried out in this investigation, it is possible to determine whether or not one independent variable is related to the dependent variable in this study. The data was analyzed using SPSS.

Measures

A 7-point Likert scale was used for all measures, with responses ranging from 1 ("Strongly Disagree") to 7 ("Strongly Agree"). All measures are presented in Table 1.

Table 1. Measures and Assesment Items

Measures	Assessment Items
Perceived Risk of Covid-19	1. I am worried about getting infected by coronavirus when using cash 2. I am worried about the residual coronavirus on the cash 3. I am uncomfortable using cash transactions 4. The fear of Covid-19 made me avoid using cash transactions 5. I prefer not to use cash transactions for the safety of my family
Perceived Ease of Use	1. I find that e-Wallet is easy to use for conducting a transaction 2. I have no problem using e-Wallet when I purchase online 3. I find e-Wallet is easy to make payment

Perceived Convenience	1. Using e-Wallet is time-saving in making payments during Covid-19 2. Using e-Wallet to make payment is easier during Covid-19 3. Using e-Wallet is more convenient during Covid-19 4. Using e-Wallet improve my ability in managing personal payments during Covid-19 5. I view e-Wallet as useful and practical during the pandemic
Government Support	1. The government encourages the use of e-Wallet for payment transactions during Covid-19 2. The government ensures that the e-Wallet server is stable during Covid-19 3. The government controls the e-Wallet payment process during Covid-19 4. Government broadcasts a budget to upgrade the e-Wallet industry during Covid-19 5. The government provides digital incentives to e-Wallet users
Intention to use e-Wallet	1. I will use e-Wallet to make payments during Covid-19 2. I prefer to use e-Wallet to make payments during Covid-19 3. I will continue to use e-Wallet to make payments even if the pandemic is over 4. I would recommend e-Wallet payment to others during Covid-19

We developed five items to assess perceived risk. An example of the item includes “I am worried about getting infected by coronavirus when using cash.” We developed three items to assess perceived ease of use. Participants were asked to provide their views on three statements linked to the perceived ease of use. An example of the item includes "*I have no problem using e-wallet when I purchase online.*" Perceived Convenience refers to how participants view the ordering experience with e-wallet during the covid-19 pandemic. We developed five items to assess perceived convenience. An example for item includes "*I view e-wallet is useful and practical during the pandemic.*"

We developed five items to assess government support. An example of the item includes "*Government encourage the use of e-wallet for payment transactions during Covid-19*." We developed four items to assess intention to use e-wallet. An example of the item includes "*I will use e-wallet to make payment during Covid-19*."

Table 2. Respondent Profile

Construct	**Frequency**	**Percentage (%)**
Gender		
Male	47	47
Female	53	53
Age		
Below 20 years old	15	15
21 – 30 years old	59	59
31 – 40 years old	18	18
41 – 50 years old	8	8
Race		

Malay	26	26
Chinese	60	60
Indian	11	11
Others	3	3
Nationality		
Malaysia	97	97
Indonesia	3	3
Educational Level		
SPM	6	6
STPM / Diploma	21	21
Bachelor of Degree	58	58
Masters	1	1
Others	14	14
E-wallet Usage Status (During pandemic Covid-19)		
Yes	95	95
No	5	5
Number of Times the E-wallet is Used in a Month		
None	3	3
Once	20	20
2-5 Times	41	41
6-10 Times	23	23
More than 10 Times	13	13

In this study, 100 respondents were selected as samples to investigate their intention to use e-Wallets since pandemic Covid-19. Table 2 depicts the profile of the respondents. More than half of those who responded to the survey were female (53%) and aged between 21 to 30 years old (59%). In addition, Chinese are the majority of the respondents (60%), and most of them have bachelor of degree qualifications (58%). In terms of e-Wallet usage (during pandemic Covid-19), almost all the respondents indicated that they have used e-Wallets (95%). Most of the respondents who used e-Wallet said that they used e-Wallet between 2 to 5 times in a month (41%).

RESULTS

Table 3. Descriptive Statistics, Cronbach's Coefficients Alpha, and Zero-order Correlations of All Study Variables

Variables	1	2	3	4	5
Perceived Risk	**0.960**				
Perceived Ease of Use	.373**	**0.957**			
Perceived Convenience	.351**	.932**	**0.965**		
Government Support	.503**	.734**	.709**	**0.868**	
Intention to Use E-wallet	.445**	.907**	.874**	.665**	**0.965**
Mean	4.004	5.833	5.754	5.036	5.685

Standard Deviation	1.710	1.466	1.442	1.331	1.386
N of Item	5	3	5	5	4

N=100. *p < .05, **p < .01, ***p < .001. Diagonal entries indicate Cronbach's coefficient alpha.

Table 3 shows Cronbach's coefficients alpha, correlations, and descriptive statistics among all the variables. In terms of data reliability, the original Cronbach's coefficients alpha of these five variables falls between 0.868 to 0.965, which means the items in these five variables have high internal consistency. The commonly accepted regulation is that alpha of 0.6-0.7 implies acceptable reliability, and 0.8 or larger indicates a very great level of reliability (Ursachi, Horodnic, & Zait, 2015). Therefore, there is no item in these five variables that will be deleted because all the Conbrach's coefficients alpha is exceeded 0.7. In terms of correlation, every variable is positively correlated with each other (**p < .01). Among them, three variables have the higher correlations, which are "Perceived Convenience" with "Perceived Ease of Use" (.932**) and "Perceived Ease of Use" with "Intention to Use E-Wallet" (.907**). In terms of descriptive statistics, the mean for all variables falls between 4.004 to 5.833, meaning respondents are neutral or agree with the question. In addition, the standard deviation of the five variables falls between 1.331 to 1.710, which means there is high variation among the respondents in answering the questionnaire. Among the five variables "Perceived Risk" has the highest standard deviation (1.710). This situation may be due to the fact that some of the respondents have different perceptions of the risks of Covid-19.

Table 4. Summary of Regression Analysis

Construct	Value
Model	1
R	0.919
R Square	0.845
Adjusted R Square	0.839
Std. Error of the Estimate	0.55662
Sig. F Change	0.000
Durbin-Watson	1.825

Dependent Variable: Intention to Use E-Wallet, *p < .05, **p < .005, ***p < .0005

As in Table 4, the model summary includes the following information: R, R square, adjusted R square, standard error of the estimate, significance change, and Durbin-Watson. The R value denotes the simple correlation, while the R square reflects the amount of variation in the dependent variable. The R value of 0.919 depicts a high level of correlation, and the R square of 84.5 % indicates a substantial connection between the independent and dependent variables. Durbin-Watson is a test for autocorrelation in statistical model residuals with a value ranging from 0 to 4. The Durbin-Watson of this model summary is 1.825, which is considered a positive autocorrelation between 0 and less than 2.

Table 5. Hypothesis Testing

Hypothesis	Standardized Beta	p-value	Decision
H1	.147**	.002	Accepted
H2	.702***	.000	Accepted
H3	.231*	.042	Accepted
H4	-.089	.171	Rejected

*p < .05, **p < .005, ***p < .0005

The probability used to test hypotheses to determine whether the null hypothesis is correct or not is referred to as the P-value. A standardized beta is a measure of how strongly each independent variable affects the dependent variable. Table 5 shows the p-value for hypothesis 1 is 0.002 lower than 0.05, indicating the hypothesis 1 perceived risk of Covid-19 has a positive impact on an individual's intention to use e-Wallets has been accepted. Hypothesis 1 has a +.147 standardized beta, indicating a small but positive relationship between the independent and dependent variables. Furthermore, hypothesis 2 regarding perceived ease of use has a positive impact on intention to use e-wallets. The p-value of hypothesis 2 is less than 0.05 (0.000), indicating that it is accepted, and has a stronger positive relationship (+.702). However, the p-value for hypothesis 3 (perceived convenience influences an individual's intention to use an e-Wallet) is 0.042 less than 0.05, and the hypothesis is accepted. The fact that hypothesis 3's standardized beta is +.231 indicates a small positive relationship. Finally, the p-value for hypothesis 4 (Government support has a positive impact on an individual's intention to use e-Wallets) is greater than 0.05 (0.171), and this hypothesis is rejected. Hypothesis 4's standardized beta value is -.089, indicating a weaker negative relationship.

DISCUSSION

The purpose of this study is to investigate the impact of Covid-19's perceived risk, perceived convenience, perceived ease of use, and government support for the purpose to use e-Wallet during the pandemic. The findings of this study illustrate that it has a significant positive relationship between it and the intention to use the e-Wallet. Therefore, H1 is supported.

Many people view that using cash for money transfers increases the risk of contracting the virus. Hence, the higher the perceived risk of Covid-19, the more likely they are to utilize e-Wallets for payment. According to Hasan, Ismail, and Islam (2017), the possibility of becoming infected with epidemic diseases such as SARS, Anthrax, MARS, or AIDS is referred to as disease risk. Consequently, the best way to avoid transmitting during CAVID-19 is to use an e-Wallet. In the context of this study, customers' views of the risk connected with covid-19 have a substantial impact on their propensity to use an e-Wallet. Similarly, Covid-19 perception of risk is inversely related to cash intention.

The findings revealed a positive relationship between perceived ease of use and intention to use an e-Wallet during the pandemic. Therefore, H2 is supported. The greater the ease with which an e-Wallet can be used to make a payment, the greater the intention to use an e-Wallet. As stated by Saadé and Bahli (2005), individuals perceive a system as easier to use if they think it requires less effort. Similarly, easy-to-use technology is one in which minimal effort is required for its operation.

Furthermore, by evaluating how easy it is for consumers to use a certain system, we can measure how well consumers accept a system. New technology acceptance is also regarded as one of the dimensions with the most significant influence on this factor (Venkatesh & Davis, 2000). According to another research handled by Guriting and Oly

Ndubisi (2006), perceived ease of use seems to have a favorable influence relationship with consumers' behavioral intentions regarding e-payment usage in Malaysia. From the result, it is evident that the p-value is 0.000 and lower than 0.05.

Besides that, the study also found that perceived convenience is associated with a significant positive impact on the use of an e-Wallet. Therefore, H3 is supported. The significant positive connection between perceived convenience and intention to use an e-Wallet was that if it is convenient to use that technology, the consumer is more likely to use it as a payment method. For example, touch' n Go eWallet, GrabPay, and Boost are well-known e-Wallets that Malaysian consumers widely used during Covid-19. Berry, Seiders, and Grewal (2002) discussed how convenience perceptions could influence the intention of the user to use the e-Wallet. According to a review of consumer convenience literature in the service economy, service convenience is how customers perceive the effort and time involved in purchasing or using a service.

Finally, the study shows no correlation between government support and the intention to use an e-Wallet. Therefore, H4 is not supported. The results depict that government support has no meaningful relationship with the intention to use an e-Wallet, as the p-value is larger than 0.05, which is 0.171. The potential reason that led to the hypothesis rejection is that the respondent demographic may not be the recipient of government support and may have a different view. Furthermore, citizen-government trust is also one element that might lead to the hypothesis being rejected. Trust implies having positive, confident expectations of competent, kind, honest, and predictable behavior in other people and organizations and acting on these expectations (Welch, Hinnant, & Moon, 2004). In Indonesia, the government supports the people, quickly criticized because it embraces deliberative democracy. However, in cities where the COVID-19 cases are high, the PSBB (large-scale social restrictions) is only partially regulated. Thus, the government offers assistance only to those living in areas with PSBB. Those who lived in the area did not feel the same way. These could be the reasons why the hypothesis is rejected.

CONCLUSION

In conclusion, many independent variables affect users' intention to use e-Wallets. Based on the research, we found 3 out of the 4 independent variables we listed can directly affect the user's intention to use e-Wallets. Among them, “Perceived Ease of Use” seems to become the one that had the most affects users' intention to use e-Wallets. The positive relationship between the two shows that the simplicity of e-Wallets pushes forward users to accept e-Wallets as a form of payment method. The second most significant independent variable is the one that this research pays more attention to which is “Perceived Risk of Covid-19”. Research illustrates that the respondents’ “Perceived risk of Covid-19” has been related to their intention to use e-Wallets in a beneficial way. This has answered one of the questions in this research, that is, people are afraid of the spread of Covid-19 and tend to make contactless payments through e-Wallets. Therefore, the outbreak of Covid-19 undoubtedly has a good development in the field of e-Wallets. Third, the analysis also shows that “Perceived Convenience” does have a strong positive relationship with the intention to use e-Wallets, indicating that the rapidity and universality of e-Wallets have attracted people to start using e-Wallets. On the other hand, although we cannot deny that the Malaysian government has introduced a series of incentives to encourage people to use e-Wallets during the epidemic, our research shows that “Government Support” is not a significant independent variable for users’ intention to use e-Wallets. This situation demonstrates people pay more attention to the simplicity (Perceived Ease of Use), practicality (Perceived Convenience), and

safety (Protective from the Risk of Covid-19) of e-Wallets compared to the incentives provided by the government (Government Support).

Nevertheless, we cannot deny that the government still has a significant impact in developing the e-Wallet industry. Government funds and policies are also silently promoting the development of the e-wallet industry. In this study, we have determined that the advent of the epidemic is indeed a good opportunity for the e-Wallet industry to expand users. Therefore, e-Wallet developers should also seize this opportunity to consolidate the position of e-Wallets in the future. For e-Wallet, developers should continue to improve the existing technology to simplify the use of e-Wallets. In addition, developers are encouraged to cooperate with more and more merchants to use e-Wallet payment everywhere to achieve its popularization. In this way, e-Wallets will be a mainstream payment method in the future, even if the epidemic is over.

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N/A

DECLARATION OF CONFLICTING INTERESTS
The authors have no conflicts of interest to declare.

REFERENCES

Aji, H. M., Berakon, I., & Md Husin, M. (2020). COVID-19 and E-wallet usage intention: A multigroup analysis between Indonesia and Malaysia. *Cogent Business & Management*, *7*(1), 1804181. doi:10.1080/23311975.2020.1804181

Ajzen, I. (1991*).* The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179-211. doi:10.1016/0749-5978(91)90020-T

Alfrina, A. (2021, July 8). *How has MCO affected the Malaysian economy?* Retrieved from https://university.taylors.edu.my/en/campus-life/news-and-events/news/how-has-mco-affected-the-malaysian-economy.html

Anuar, N. I., Nik Mahdi, N. M., Nik Hashim, N. A., Mohamad, S. R., Zainuddin, S. A., Azmi, N. F., & Wan Zulkiffli, W. F. (2020). The barriers towards the adoption of e-wallet payment system. *International Journal of Engineering Research and Technology*, *13*(11), 3772. doi:10.37624/ijert/13.11.2020.3772-3777

Anwar, A., Kee, D. M. H., Salman, A., & Jabeen, G. (2021). Impact of COVID-19 social media news on employee behavior: The mediating role of psychological well-being and depression, *Asian Development and Educational Studies, 11*(1), 196-211. doi:10.1108/AEDS-07-2020-0159

Bauer, R. A. (1960). Consumer behavior as risk taking. *Proceedings of the 43rd National Conference of the American Marketing Apssocation, June 15, 16, 17, Chicago, Illinois, 1960*.

Berry, L. L., Seiders, K., & Grewal, D. (2002). Understanding service convenience. *Journal of Marketing*, *66*(3), 1–17.

Chang, C., Yan, C., & Tseng, J. (2012). Perceived convenience in an extended technology acceptance model: Mobile technology and English learning for college students. *Australasian Journal of Educational Technology*, *28*(5), 809-826. doi:10.14742/ajet.818

Chawla, D., & Joshi, H. (2020). Role of mediator in examining the influence of antecedents of mobile wallet adoption on attitude and intention. *Global Business Review*, 097215092092450. doi:10.1177/0972150920924506

World Health Organization. (n.d.). *Coronavirus.* Retrieved from https://www.who.int/health-topics/coronavirus#tab=tab_1

Cunningham, M. S. (1967). The major dimensions of perceived risk. *Risk taking and information handling in consumer behavior,* 82-108.

Daragmeh, A., Sági, J., & Zéman, Z. (2021). Continuous intention to use E-wallet in the context of the COVID-19 pandemic: Integrating the health belief model (HBM) and technology continuous theory (TCT). *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(2), 132-154. doi:10.3390/joitmc7020132

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319-340. doi:10.2307/249008

Edeh, F. O., Aryani, D. N., Kee, D. M. H., Samarth, T., Nair, R. K., Tan, Y. S., & Teh, Y. C. (2021). Impact of COVID-19 pandemic on consumer behavior towards the intention to use e-wallet in Malaysia. *International Journal of Accounting & Finance in Asia Pasific (IJAFAP)*, *4*(3), 42-59.

Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach*. Oxfordshire, Taylor & Francis.

MyGovernment. (n.d.). *Getting electronic payment information/e-wallet*. Retrieved from https://www.malaysia.gov.my/portal/content/30797

Grover, P., Kar, A. K., Janssen, M., & Ilavarasan, P. V. (2019). Perceived usefulness, ease of use and user acceptance of blockchain technology for digital transactions—Insights from user-generated content on Twitter. *Enterprise Information Systems, 13*, 771–800.

Guriting, P., & Oly Ndubisi, N. (2006). Borneo online banking: Evaluating customer perceptions and behavioral intention. *Management Research News*, 29(1/2), 6-15. doi:10.1108/01409170610645402

Hamid, A. A., Razak, F. Z. A., Abu Bakar, A., & Abdullah, W. S. W. (2016). The effects of perceived usefulness and perceived ease of use on continuance intention to use e-government. *Procedia Economics Finance, 35*, 644–649.

Hasan, M. K., Ismail, A. R., & Islam, M. F. (2017). Tourist risk perceptions and revisit intention: A critical review of literature. *International Journal of Bank Marketing*, *35*(3), 354-369.doi:10.1080/23311975.2017.1412874

Hu, M. K., & Kee, D. M. H. (2021a). SMEs and business sustainability: Achieving sustainable business growth in the new Normal. In N. Baporikar, (Ed.), *Handbook of Research on Sustaining SMEs and Entrepreneurial Innovation in the Post-COVID-19 Era* (pp. 331-351). Hershey, PA: IGI Global. doi:10.4018/978-1-7998-6632-9.ch016

Hu, M. K., & Kee, D. M. H. (2021b). Strategic measures and tactical interventions for COVID-19 Impact Relief on SMEs. In N. Baporikar, (Ed.), *Handbook of Research on Strategies and Interventions to Mitigate COVID-19 Impact on SMEs* (pp.522-541). Hershey, PA: IGI Global. doi:10.4018/978-1-7998-7436-2

Huang, R. (2020, March 9). *WHO encourages use of contactless payments due to COVID-19.* Retrieved from https://www.forbes.com/sites/rogerhuang/2020/03/09/who-encourages-use-of-digital-payments-due-to-covid-19/?sh=7989231e41eb

Jackson, C. M., Chow, S., & Leitch, R. A. (1997). Toward an understanding of the behavioral intention to use an information system. *Decision Sciences, 28*(2), 357-389.

Karim, M. W., Haque, A., Ulfy, M. A., Hossain, M. A., & Anis, M. Z. (2020). Factors influencing the use of E-wallet as a payment method among Malaysian young adults. *Journal of International Business and Management*, *3*(2), 01-12.

Kee, D. M. H., Al-anesi, M., Chandran, S., Elanggovan, H., Nagendran, B., & Mariappan, S. (2021). COVID-19 as a double-edged sword: The perfect opportunity for GrabFood to optimize its performance. *Journal of the Community Development in Asia, 4*(1), 53-65.

Li, C., Mirosa, M., & Bremer, P. (2020). Review of online food delivery platforms and their impacts on sustainability. *Sustainability*, *12*(14), 5528. doi:10.3390/su12145528

Liu, D., & Li, M. (2019). Exploring new factors affecting purchase intention of mobile commerce: Trust and social benefit as mediators. *International Journal of Mobile Communications, 17*(1), 108-125.

Risk. (n.d.). In *Cambridge Dictionary.* Retrieved from https://dictionary.cambridge.org/dictionary/english/risk

Ministry of Finance Malaysia. (2020). *Frequently asked questions (FAQ) RM50 ePENJANA credits progamme.* Retrieved from https://penjana.treasury.gov.my/pdf/ePENJANA-FAQ-EN.pdf

Mun, Y. P., Khalid, H., & Nadarajah, D. (2017). Millennials' perception on mobile payment services in Malaysia. *Procedia Computer Science, 124*, 397–404.

Munir, F., Anwar, A., & Kee, D. M. H. (2021). Online learning and students' fear of Covid-19 and online learning: Study in Malaysia and Pakistan. *The International Review of Research in Open and Distributed Learning, 22*(4), 1-21.

Okazaki, S., & Mendez, F. (2013). Exploring convenience in mobile commerce: Moderating effects of gender. *Computers in Human Behavior*, *29*(3), 1234-1242. doi:10.1016/j.chb.2012.10.019

Ozkan, M., & Solmaz, B. (2015). Mobile addiction of generation z and its effects on their social lifes. *Procedia - Social and Behavioral Sciences*, *205*, 92-98. doi:10.1016/j.sbspro.2015.09.027

Ozturk, A. B., Bilgihan, A., Nusair, K., & Okumus, F. (2016). What keeps the mobile hotel booking users loyal? Investigating the roles of self-efficacy, compatibility, perceived ease of use, and perceived convenience. *International Journal of Information Management, 36*(6), 1350-1359. doi:10.1016/j.ijinfomgt.2016.04.005

Pachpande, B. R., & Kamble, A. A. (2018). Study of e-wallet awareness and its usage in Mumbai. *Journal of Commerce and Management Thought*, *9*(1), 33-45. doi:10.5958/0976-478x.2018.00004.6

Peter, J. P., & Olson, J. C. (2005). *Consumer behavior and marketing strategy*. New York: McGraw-Hill/Irwin.

Phonthanukitithaworn, C., Sellitto, C., & Fong, M. W. (2016). An investigation of mobile payment (M-payMent) services in Thailand. *Asia-Pacific Journal of Business Administration*, *8*(1), 37-54. doi:10.1108/apjba-10-2014-0119

Povera, A., & Harun H. N. (2021). Govt outlines programmes to assist women, youth and persons with disabilities. Retrieved from https://www.nst.com.my/news/nation/2021/03/674697/govt-outlines-programmes-assist-women-youth-and-persons-disabilities

Quach, S., Thaichon, P., & Hewege, C. (2020). Triadic relationship between customers, service providers and government in a highly regulated industry. *Journal of Retailing and Consumer Services*, *55*(C), 102148. doi:10.1016/j.jretconser.2020.102148

Rahi, S., Khan, M. M., & Alghizzawi, M. (2020). Extension of technology continuance theory (TCT) with task technology fit (TTF) in the context of internet banking user continuance intention. *International Journal of Quality & Reliability Management*, *38*(4), 986-1004. doi:10.1108/ijqrm-03-2020-0074

Roy, S. K., Shekhar, V., Lassar, W. M., & Chen, T. (2018). Customer engagement behaviors: The role of service convenience, fairness and quality. *Journal of Retailing and Consumer Services, 44*(1), 293-304.doi:10.1016/j.jretconser.2018.07.018

Saadé, R., & Bahli, B. (2005). The impact of cognitive absorption on perceived usefulness and perceived ease of use in on-line learning: An extension of the technology acceptance model. *Information & Management*, *42*(2), 317-327. doi:10.1016/j.im.2003.12.013

The Star. (2021, June 04). *Students put Ebelia credit to good use*. Retrieved from https://www.thestar.com.my/news/nation/2021/06/04/students-put-ebelia-credit-to-good-use

Tarver, E. (2021, October 31). *How do government subsidies help an industry?* Retrieved from https://www.investopedia.com/ask/answers/060215/how-do-government-subsidies-help-industry.asp

Tunde, O. A., Kee, D. M. H., Ayodele, A. Y., Lukman, J. A., & Abiodun, A. O. (2021). Blessing or curse: Converting COVID-19 experience to entrepreneurial opportunity identification. *Journal of Hunan University Natural Science, 48*(10), 529-537.

Upadhayaya, A. (2012). Electronic Commerce and E-wallet. *International Journal of Recent Research and Review*, *1*(1), 37-41.

Ursachi, G., Horodnic, I. A., & Zait, A. (2015). How reliable are measurement scales? External factors with indirect influence on reliability estimators. *Procedia Economics and Finance*, *20*, 679-686. doi:10.1016/s2212-5671(15)00123-9

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, *46*(2), 186-204. doi:10.1287/mnsc.46.2.186.11926

Vijayasarathy, L. R. (2004). Predicting consumer intentions to use on-line shopping: The case for an augmented technology acceptance model. *Information & Management*, *41*(6), 747-762. doi:10.1016/j.im.2003.08.011

Welch, E. W., Hinnant, C. C., & Moon, M. J. (2005). Linking citizen satisfaction with e-government and trust in government. *Journal of Public Administration Research and Theory, 15*(3), 371-391. doi:10.1093/jopart/mui021

Wijayanthi, I. (2019). Behavioral intention of young consumers towards E-wallEt adoption: An empirical study among Indonesian users. *Russian Journal of Agricultural and Socio-Economic Sciences*, *85*(1), 79-93. doi:10.18551/rjoas.2019-01.09

Wisniewski, T. P., Polasik, M., Kotkowski, R., & Moro, A. (2021). Switching from cash to cashless paymentsduring the COVID-19 pandemic and beyond. *SSRN Electronic Journal*. doi:10.2139/ssrn.3794790

Xu, F., Huang, S. (S)., & Li, S. (2019). Time, money, or convenience: What determines Chinese consumers' continuance usage intention and behavior of using tourism mobile apps? *International Journal of Culture, Tourism and Hospitality Research*, *13*(3), 288-302. doi:10.1108/ijcthr-04-2018-0052

Zhao, Y., & Bacao, F. (2021). How does the pandemic facilitate mobile payment? An investigation on users' perspective under the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, *18*(3), 1016. doi:10.3390/ijerph18031016