E-Wallet Usage Intention in Selangor, Malaysia

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Abstract: According to a report by Fintech News Malaysia, there are more than 53 e-wallets in Malaysia, with the industry occupying 19% of Malaysian Fintech space. Furthermore, in Malaysia, e-wallets such as GrabPay, Boost, Ipsos, and Touch’n Go remain some of the preferred e-wallet applications as the cashless and contactless benefits of e-wallets were beneficial during the COVID-19 pandemic. As there was a surge in the usage of e-wallets, especially in Selangor, Malaysia. Thus, it is important to examine the influence of variables such as perceived COVID-19 risk, perceived usefulness, government support, and perceived ease of use with the intention to use e-wallets in Selangor, Malaysia. As there are still lack of studies, especially in the Malaysian context, the aim of the research was to study the possible influence that these variables may have on the intention to use e-wallets in Selangor, Malaysia. Subsequently, this would impact policymakers toward the enhancement of e-wallet applications in Malaysia. The study used a deductive approach with questionnaires distributed online to 200 consumers in Selangor. SPSS was used to conduct the data analysis. The results of the study showed that all the variables of the study (perceived COVID-19 risk, perceived usefulness, government support and perceive ease of use) had significant positive relationships with intention to use e-wallets in Selangor, Malaysia. The findings of this research revealed that consumers place importance on government support especially during a time of crisis and consumers desire e-wallet applications to be user-friendly and useful, which is the scientific novelty of this study. Implications of the research findings are presented as well.

Keywords: intention to use e-wallet, perceived COVID-19 risk, perceived usefulness, government support, perceived ease of use.
1. Introduction

E-wallets, also known as electronic wallets are one of the best innovations of the 21st century [1]. E-wallets are a kind of digital transaction that operate with the systematic usage of quick response (QR) codes at the transaction time [1]. As defined in [2], e-wallet is a type of electronic card that allows consumers to store their physical card information in a server and conduct transactions using smart devices. E-wallet usage intention is a fundamental method for forecasting an individual’s behavior toward e-wallet acceptance or rejection [3]. During the COVID-19 pandemic, government authorities were forced to use non-pharmaceutical measures such as physical distancing, lockdown, and quarantine to slow the spread of COVID-19 [4]. E-wallet adoption during the pandemic was suitable since standard operating procedures (SOPs) such as physical distancing and quarantine allowed consumers to make payments without the need for physical contact [5].

As found in [6], the COVID-19 pandemic had reduced the number of consumers making physical cash transactions. This is because consumers worry that the novel coronavirus will be easily transmitted from one individual to another when using cash. Therefore, e-wallets are considered a type of protective behavior during pandemics. Some consumers even went as far as to argue that shifting users to digital financial services such as electronic wallets could help minimize the virus’ spread and severity [4]. E-wallets accelerate transactions between consumers to machines, online shopping, and businesses during COVID-19. Given the uncertainty about when the pandemic will end, [7] found that widespread use of e-wallets could eventually lead to cashless societies in the future. [8] indicated that e-wallet usage intention measures the intensity of one’s intention to adopt the technology. An individual’s adoption or use of an e-wallet is influenced by his or her attitude toward technology and perceived usefulness of technology [9].

Across the globe, consumers are shifting to a cashless community because of the risk of infection with COVID-19 [10]. A survey conducted by Statista in 2020, indicated that the global electronic wallet adoption rate is on an upward trend. Globally, the e-wallet adoption rate in 2020 was 50% to 55% and is expected to increase to 75% by 2025. Asia-Pacific had the highest adoption rate, 38% to 40%, during Covid-19, followed by North America, Latin America, and Europe at 25% to 28% and 10% to 12%, respectively [11]. E-wallets were introduced in Malaysia in 2015; however, the adoption of e-wallets in Malaysia was still in its infancy stage at that time [12]. The share of those who used digital wallets increased from the fourth quarter of 2019 to the first quarter of 2020, with the outbreak of the COVID-19 pandemic. The pandemic increased the use of e-wallets in Malaysia in the year 2020, and according to [13], 68 % of Malaysian respondents stated that they had made payments through e-wallets in the first quarter of year 2022. The state of Selangor has the highest usage of e-wallets as it has the largest economy and is the most populous in Malaysia with 6.56 million people as of the second quarter of the year 2021 [14].

From the review of past studies, research on the effect of social influence, security confidence, and trustworthiness on e-wallet usage intention, especially during the COVID-19, was conducted [15]. However, there is still a lack of studies on the relationship between perceived COVID-19 risk, perceived usefulness, government support, and perceived ease of use with the intention to use e-wallets, especially in Selangor, Malaysia. According to the report by Ipsos Public Affairs, it was indicated that despite the recent acceleration of vaccination in Malaysia, the risk of infection with COVID-19 continues to loom large in shaping people’s perceptions of the country’s state [16]. Evidence indicated that since the COVID-19 pandemic began in 2020, Malaysians started using e-wallets to make their payments as COVID-19 could be transmitted via handling cash, coins, and credit cards [17]. According to [18] the perceived COVID-19 risk prompted consumers in Malaysia to choose digital payment over cash as most nations including Malaysia...
would go cashless by 2030. Furthermore, according to [19], as consumers are becoming aware of the payment structure, the payment-as-a-service market has seen massive growth. A certain degree of shift in consumers from traditional payments to digital payments has been observed due to the perceived COVID-19 risk. This is largely because of the concerns associated with the transmission of coronavirus through cash transactions. Thus, this study examines the influence of perceived COVID-19 risk on e-wallet usage intention in Selangor, Malaysia, as there seems to be an association between perceived COVID-19 risk and the intention to use e-wallet.

Perceived usefulness is another factor that may influence the e-wallet usage intention. Perceived usefulness in this study is the new technology implementation that can improve performance, job efficiency, and enhance the productivity of an individual. In Malaysia, e-wallets such as the Boost e-wallet are currently the most widely used e-wallet in Malaysia owing to their ability to pay utility bills, top-up mobile phones, and provide additional incentives to existing users. Touch ‘n Go is the second e-wallet service provider with a strong market presence due to its innovative new features such as DuitNow transfer, Pay Direct, and Radio-frequency identification (RFID) [20]. However, other e-wallet service providers such as BigPay, Maybank QR, and Samsung Pay also have features that assist Malaysian users in resolving issues and increasing their efficiency. Furthermore, Malaysians have used credit cards and cash to make transactions for more than ten years, and it has always worked well. However, by using e-wallets, consumers do not need to bring large amounts of cash and count them one by one. Besides, e-wallets allow inter-transfer between one individual and another individual, and it is useful when users transfer from a far distance and users do not need to always key in the identification and password [21]. It saves time and improves the efficiency. Thus, this study examines the effect of perceived usefulness on e-wallet usage intention in Selangor, Malaysia. This is because there seems to be an association between perceived usefulness and the intention to use e-wallets in Selangor, Malaysia.

The support from the government is one of the many drivers that can increase the intention to use e-wallets in Malaysia. Government support here includes the initiative to encourage e-wallet usage, such as innovative e-wallet development and government assistance programs via e-wallet [22]. The Malaysian government has introduced several initiatives to encourage the use of e-wallets among Malaysians. For example, the e-Tunai Rakyat initiative, eBelia initiative, and the ePenjana initiative credit certain amounts into account for e-wallet users [23]. According to [13, 24] the usage of e-wallets has increased to 63% during the e-Tunai Rakyat Campaign. However, the usage of e-wallets dipped to 49% after the campaign ended. According to the survey, 55% of users indicated that they would not use the e-wallet without incentives. In Malaysia, not every e-wallet is accepted by traders. Moreover, different traders prefer different e-wallet platforms, which make users download and prepare numerous e-wallet applications. Customers may be unable to complete their transactions if they do not have a specific e-wallet application in a particular shop. While the market welcomes more e-wallet service providers, it will pose a problem for customers who do not fully understand how to use them. Hence, the government plays an important role in controlling e-wallet license issues and quality control policy. Besides, the Malaysian government should increase internet connectivity coverage. The unstable and slow network speed in certain parts of Selangor, Malaysia, would make it difficult for e-wallets to be adopted. Thus, this study examines the effect of government support on e-wallet usage intention in Selangor, Malaysia, as there seems to be an association between government support and the intention to use e-wallet.

Lastly, the perceived ease of use, which includes ease of learning, convenience, and ease of navigation, may influence the perception of an individual about using the e-wallet. According to [25], some consumers have complained that using the e-wallet is inconvenient and not as simple to use as paywave, indicating that credit and debit cards are a more convenient method for making contactless payments. This is because people do not need to go to another application, scan codes, enter a personal identification number (PIN), and top up credit [25]. If the wallet runs out of credit, the user must go through an additional step to top up credit, which might be cumbersome for users unfamiliar with the system. [26] concluded that age is an important variable that plays an important role in perception of ease of use of the system and the intention to use e-wallet. Therefore, it may indicate that older people are less likely to adopt the e-wallet because it requires several steps to set up, verify, top-up, and use it. Furthermore, some users have complained that using an e-wallet can easily lead to uncontrollable problems. For example, it takes a long time to withdraw money from an e-wallet to a bank due to high load and slow connectivity between apps and servers. Also, users are unsure whether the money has been transferred to the bank [27]. Thus, based on the issues mentioned above, this study examines whether perceived ease of use can influence e-wallet usage intention in Selangor, Malaysia, as there seems to be an association between perceived ease of use and the intention to use e-wallet.

Hence, the purpose of this research is to analyze the likely relationships that may exist between perceived COVID-19 risk, perceived usefulness, government support, and perceived ease of use with the intention to use e-wallets in Selangor, Malaysia. The results of this
research would not only enrich current literature but also establish awareness and advocate the appropriate measures needed to enhance the usage of e-wallets in Selangor, Malaysia. Most importantly, the findings of this study will contribute to both theory and practice.

2. Literature Review

2.1. Perceived COVID-19 Risk

Perceived COVID-19 risk refers to individuals’ perceived susceptibility to a disease and its perceived severity [28]. According to [29], perceived COVID-19 risk was found to have a positive association with the intention to use e-wallets in Sri Lanka. The authors found that perceived COVID-19 risk led to the behavioral change, and the COVID-19 pandemic strongly influenced the use of e-wallets. The study supported that coronavirus uncertainty and mass dissemination is the influential factors affecting consumers to use e-wallets during COVID-19. According to [30], perceived COVID-19 risk is a key factor influencing consumer intention to use an e-wallet. The authors found that people who believe they are at risk of contracting a disease will take preventive measures, such as using an e-wallet during a transaction. Significant evidence of the relationship between perceived COVID-19 risk and the intention to use e-wallets in Asian countries was indicated [31]. Consumers in Asian countries such as Malaysia, Indonesia, Thailand and Vietnam took proactive measures such as encouraging the use of e-wallets to reduce physical contact during transactions. This is because social distance and avoidance of physical contact were significant measures in containing coronavirus. In addition, as found in [32], COVID-19 have accelerated people’s intention to use e-wallets, indicating that perceived COVID-19 risk has a significant influence on intention to use an e-wallet. As such, we proposed based on this literature review that:

H1: There is a significant positive relationship between perceived COVID-19 risk and the intention to use e-wallets in Selangor, Malaysia.

2.2. Perceived Usefulness

Perceived usefulness is defined as the users’ belief that using a particular system will improve job efficiency and performance [33]. According to [34], perceived usefulness was found to have a positive and significant impact on intention to use e-wallets in Indonesia. The study confirms that perceived usefulness influences the intention of users in Surabaya, Indonesia to use e-wallets as a payment method. The user perceives e-wallets as handy transactional payment to increase effectiveness, and this perception led to a shift from cash transactions to non-cash transactions. As revealed in [5], e-wallet services were widely used in China during the COVID-19 pandemic due to their convenience, reliability, usefulness, and contact-free feature. According to [35], the study posits the effect of perceived usefulness on intention to use e-wallets in Indonesia. The findings revealed that perceived usefulness positively influenced the intention to use e-wallets. Furthermore, the authors found that the benefits of using an e-wallet service during the pandemic improved user productivity. The same applies to [36], as the authors confirmed that perceived usefulness had a significant impact on consumer intention to use e-wallets. The study stated that most e-wallet users in India and China use this mode because they do not need to visit banks and automated teller machines (ATMs) frequently. As such, we proposed based on this literature review that:

H2: There is a significant positive relationship between perceived usefulness and the intention to use e-wallets in Selangor, Malaysia.

2.3. Government Support

Government support is defined as government action designed to provide an economic benefit to a specific entity or group of entities that meet certain criteria [37]. As found in [38], government support in e-wallets innovation, especially during the COVID-19 pandemic, has a positive influence on the intention to use e-wallets in India. The government provides incentives such as the Bharat Bill Payment System (BBPS) to encourage people to use e-wallets in India. Therefore, government support has a positive relationship between government support and intentions to use an e-wallet. Additionally [39] found that government support plays a significant role in affecting the intention to use an e-wallet. Government support for network infrastructure and connectivity speed has increased the adoption rate of e-payments and other digital transactions such as online and e-wallet transactions. [40] report indicated that the efficiency and usability of network connectivity are essential prerequisites for users to perform financial transactions on websites. The report revealed that government support in network infrastructure and connectivity had an influence on the intention to use e-wallets. According to [41], government support in the form of internet services, regulatory programs, accessibility, and guaranteeing of security in online payments in China had a significant impact on e-wallet usage in China. Hence, we proposed based on this literature review that:

H3: There is a significant positive relationship between government support and the intention to use e-wallets in Selangor, Malaysia.

2.4. Perceived Ease of Use

The perceived ease of use is defined as the degree to which the prospective user expects the particular system to be free of effort [42]. As indicated [43], many consumers have reported that e-wallet
applications are easy to use. The authors found that the perceived ease of use significantly influences the intention to use an e-wallet. Furthermore, [44] stated that perceived ease of use had a significant positive relationship with intention to use the e-wallet. The study indicated that the ease of learning e-wallet applications led to more consumers adopting the service. As stated in [45], there is significant evidence of a relationship between perceived ease of use and the intention to use the e-wallet. The ease of use of e-wallets was a strong motivator for generation Y and Z to use the e-wallet service. Therefore, summarizing the results from both studies, perceived ease of use had a significant influence on the intention to use the e-wallet. According to [46], perceived ease of use positively correlates with intention to use the e-wallet, while [44] stated that a convenient and easy system assessable frequently by users influenced consumers’ intention to use an e-wallet. As such, we proposed based on this literature review that:

H4: There is a significant positive relationship between perceived ease of use and the intention to use e-wallets in Selangor, Malaysia.

![Fig. 1 Conceptual framework (Developed by the authors)](image)

3. Research Method

3.1. Sample

The study was conducted using the quantitative research method deductive approach of distributing questionnaires, focusing on consumers within the age group of 20 to 55 who live in Selangor. A total of 200 questionnaires were distributed. The state of Selangor was chosen because, according to [13], this state has one of the highest e-wallet users, which may be due to this state being the most populous state. The nonprobability sampling method was used in collecting the sample in this study.

3.2. Questionnaire Design

The questionnaire had two sections. The first section of the questionnaire dealt with the demographic profile consisting of gender, race, age, highest education level, and monthly income. The second section of the questionnaire included questions related to the independent and dependent variables of the study. A four-item scale to measure perceived COVID-19 risks, perceived usefulness, government support, and intention to use e-wallet adapted from [22] was applied in the questionnaire. Next, a four-item scale for perceived ease of use was adapted from [47]. Each of the variables in this study was measured using a 5-point Likert scale ranging from (1) “strongly disagree” to (5) “strongly agree”.

3.3. Data Analysis

Using SPSS software, the study found that Cronbach’s Alpha coefficient for all independent and dependent variables was 0.868. It demonstrated that these variables scaled reliability and had a high level of internal consistency as the result showed greater than 0.7. The Cronbach’s Alpha values for each independent and dependent variable were tested and represent values higher than 0.7. The Cronbach’s Alpha value for intention to use e-wallet was 0.774, perceived COVID-19 risk was 0.822, perceived usefulness was 0.708, government support was 0.707, and perceived ease of use was 0.754. Hence, the Cronbach’s Alpha values demonstrated that the overall consistency and reliability of the data were acceptable. The Z-score calculation for normality was -2.895 which is within -3.29 < Z > 3.29. Furthermore, the linearity test assumption was met based on a randomized pattern of the scattergram.

3.4. Demographics of the Respondents

Table 1 shows the respondents’ demographic profiles.

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>106</td>
<td>53.0</td>
</tr>
<tr>
<td>Female</td>
<td>94</td>
<td>47.0</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malay</td>
<td>28</td>
<td>14.0</td>
</tr>
<tr>
<td>Chinese</td>
<td>148</td>
<td>74.0</td>
</tr>
<tr>
<td>Indian</td>
<td>21</td>
<td>10.5</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 25 years old</td>
<td>97</td>
<td>48.5</td>
</tr>
<tr>
<td>26-35 years old</td>
<td>64</td>
<td>32.0</td>
</tr>
<tr>
<td>36-45 years old</td>
<td>34</td>
<td>17.0</td>
</tr>
</tbody>
</table>
The respondents comprised 53% males and 47% females. In terms of race, Chinese respondents have the highest value of 148 persons, accounting for 74% of all respondents. Malays were ranked second with 28 respondents, and Indian made the third group with 21 respondents, accounting for 14% and 10.5%, respectively. The remaining respondents had other nationalities, with 3 respondents representing 1.5% in the sample in this study had Bachelor’s Degree, representing 48.5%, followed by 64 (32%) respondents aged between 26-35 years old, 34 (17%) respondents aged between 36-45 years old, 4 (2%) respondents aged between 46-55 years old and 1 (0.5%) respondent aged above 55 years old. Most respondents were aged below 25 years old, with a total of 97 respondents accounting for 48.5%, followed by 64 (32%) respondents aged between 26%-35 years old, 34 (17%) respondents aged between 36-45 years old, 4 (2%) respondents aged between 46-55 years old and 1 (0.5%) respondent aged above 55 years old. The majority of the sample in this study had Bachelor’s Degree, accounting for 74% of the total respondents.

### 4. Results

#### 4.1. The Pearson Correlation

The relationships between perceived COVID-19 risk, perceived usefulness, government support, and perceived ease of use were tested with intention to use e-wallets in the Pearson correlation test. The results indicate that the perceived ease of use was 0.398, perceived usefulness was 0.430, government support was 0.429, and perceived ease of use was 0.486. Table 2 shows the results of the Pearson correlation test. All four variables had significant linear relationships with intention to use e-wallet achieving a p value of less than 0.01. Table 2 shows the results of the Pearson correlation test.

<table>
<thead>
<tr>
<th>Intention to use E-wallet</th>
<th>Perceived COVID-19 Risk Pearson’s Correlation</th>
<th>Perceived Usefulness</th>
<th>Government Support</th>
<th>Perceived Ease of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>0.398</td>
<td>0.430</td>
<td>0.429</td>
<td>0.486</td>
</tr>
<tr>
<td>Sig. (2 tailed)</td>
<td>&lt; 0.01</td>
<td>&lt; 0.01</td>
<td>&lt; 0.01</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>N</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

#### 4.2. Multiple Regression Analysis

The Durbin-Watson test resulted in 1.876, which is within the required range of 1 to 3. This result indicates no autocorrelation among residuals (homoscedasticity). The R square shows a value of 0.395, meaning that 39.5% of the total variance in the dependent variable is explained by the total independent variables. Table 3 shows the model summary.

<table>
<thead>
<tr>
<th>Model Summary b</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimation</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.628a</td>
<td>0.395</td>
<td>0.382</td>
<td>0.43046</td>
<td>1.876</td>
</tr>
</tbody>
</table>

According to ANOVA analysis, the p-value is 0.000; hence, the model is statistically significant. As such, the model is considered fit for further analysis. The F value of 31.779 indicates that the conceptual model is strongly significant, and the variation is not totally accounted for by possibility. Table 4 shows the analysis of variance (ANOVA) in this study.

<table>
<thead>
<tr>
<th>ANOVAa</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>23.554</td>
<td>4</td>
<td>5.889</td>
<td>31.779</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>36.133</td>
<td>195</td>
<td>0.185</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>59.687</td>
<td>199</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The coefficients in Table 5 reveal that H1, H2, H3 and H4 are accepted as significant values for perceived COVID-19 risk, perceived usefulness, government support and perceived ease of use with intention to use e-wallet were all lower than 0.05. The highest B value obtained in this study belongs to the perceived ease of use, which is 0.378, hence being the most central factor in this study affecting intention to use e-wallets. Additionally, perceived COVID-19 risk, perceived usefulness, and government support all had positive B values, which means that when these independent variables increase, intention to use e-wallets increases too. Lastly, was the analysis of collinearity statistics. In this study, the VIF values for all independent variables were moderately correlated. Therefore, the result shows that no multicollinearity problem exists. Table 5 represents the results of the coefficients, while Table 6 shows the summary of the hypotheses results.

Table 5Results of the coefficients (Developed by the authors)

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>Constant</td>
<td>0.363</td>
<td>0.352</td>
<td>-0.269</td>
</tr>
<tr>
<td>Perceived COVID-19 risk</td>
<td>0.218</td>
<td>0.049</td>
<td>0.269</td>
</tr>
<tr>
<td>Perceived usefulness</td>
<td>0.141</td>
<td>0.067</td>
<td>0.139</td>
</tr>
<tr>
<td>Government Support</td>
<td>0.177</td>
<td>0.076</td>
<td>0.152</td>
</tr>
<tr>
<td>Perceived Ease of Use</td>
<td>0.378</td>
<td>0.073</td>
<td>0.334</td>
</tr>
</tbody>
</table>

Table 6 Summary of the hypothesis results (Developed by the authors)

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Significance</th>
<th>Results</th>
<th>Gradient (Beta, β)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>0.001</td>
<td>Accepted</td>
<td>0.218</td>
</tr>
<tr>
<td>H2</td>
<td>0.037</td>
<td>Accepted</td>
<td>0.141</td>
</tr>
<tr>
<td>H3</td>
<td>0.021</td>
<td>Accepted</td>
<td>0.177</td>
</tr>
<tr>
<td>H4</td>
<td>0.001</td>
<td>Accepted</td>
<td>0.378</td>
</tr>
</tbody>
</table>

5. Discussion

The research results have shown that perceived COVID-19 risk has a significant positive relationship with intention to use e-wallets in Selangor, Malaysia, similar to past studies [29]-[32]. Perceived COVID-19 risk is a significant factor influencing the intention to use an e-wallet in Selangor, Malaysia as consumers may be afraid of the disease spreading from person to person via droplets on physical objects. Likewise, similar to past research, perceived usefulness has a significant positive relationship with intention to use e-wallets in Selangor, Malaysia, similar to past studies [34]-[36]. Perceived usefulness is a significant factor influencing intention to use e-wallets in Malaysia as consumers may find that using the e-wallet is less time consuming when making payments. Also, government support has a significant positive relationship with intention to use e-wallets in Selangor, Malaysia, similar to past studies [38]-[41]. The Malaysian government support and initiatives taken have had a strong influence on the intention to use e-wallets in Malaysia. Lastly, perceived ease of use has a significant positive relationship with intention to use e-wallets in Selangor, Malaysia, supported by past research [43]-[46]. Moreover, the B value of perceived ease of use was found to have the highest value among other independent variables, hence being the most crucial factor influencing intention to use e-wallets. The study proved that perceived ease of use, such as user-friendly application and ease of learning, is the most potent factor influencing user intention to use the e-wallet.

This study examined the factors that influence intention to use e-wallets in Selangor, Malaysia. This study examined intention to use e-wallet from four aspects: perceived COVID-19 risk, perceived usefulness, government support, and perceived ease of use. According to the findings, these four independent variables positively correlate with the intention to use e-wallets. Therefore, the study’s theoretical contribution is the extension of the unified theory of acceptance and use of technology with variables from this study, which are perceived COVID-19 risk, perceived usefulness, government support, and perceived ease of use, which have a significant relationship with the intention to use e-wallets in Selangor, Malaysia. The practical contribution would be the results of these study would urge Malaysian policy makers, professional bodies and the consumer association of Malaysia to work together toward implementing policies that would facilitate the use of e-wallet with emphasis on creating awareness on the importance of using e-wallet and its benefits especially during the COVID-19, creating easy to use guides or manuals that are accessible to both the younger and older generation and working toward government initiatives that would boost the use of e-wallet among. Furthermore, this research will assist entrepreneurs and
e-wallet service providers in better understanding the factors that influence the intention to use an e-wallet in Malaysia. However, the adoption of e-wallets in Malaysia is still in its infancy. The study can help entrepreneurs consider implementing appropriate e-wallet practices and strategies in businesses such as developing ad commercialized value-added services (VAS) that should be data-driven and tech-enabled [48]. By implementing e-wallet service, companies can encourage more e-wallet users and attract more customers in business [49]. In addition, this study can also help entrepreneurs understand the benefits of implementing e-wallet services and thus improve the organization efficiency [40]. Furthermore, the findings of this study can be used by e-wallet service providers in gaining a thorough understanding of consumer intent to use e-wallets and improve their services [51]. As a result, the e-wallet service provider can create and deliver an enhanced e-wallet application to increase e-wallet user adoption [4]. The e-wallet service provider is able to develop further strategies that may encourage consumer loyalty regarding e-wallets by reassuring customers that these financial services deliver the value and benefits users expect.

It is with great hope that the government, entrepreneurs, and e-wallet service providers will collaborate to increase the use of e-wallets in Malaysia. Hence, the study will benefit consumers to have more payment options that are easy, fast, convenient, and practical to improve their lives, especially during this challenging time [52]. Moreover, consumers will gain knowledge and understand how the e-wallet service will solve their problems. This will assist consumers in developing perceptions or their own views of e-wallet services to make better decisions. Lastly, this study will be beneficial to other researchers who are interested in conducting future research on e-wallet usage intentions [53]. Future researchers can use this study to delve deeper into a related topic. Researchers will benefit because it will provide researchers with more information about the factors that influence their decision to use an e-wallet [54].

6. Conclusion

Meanwhile, in today’s rapidly changing technology, the shortcomings of this study can be identified, analyzed, and improved, making the research more comprehensive. The scientific novelty of this study is the findings of this research that reveal that consumers place importance on government support, especially during a time of crisis, and consumers desire e-wallet applications to be user friendly and useful.

There are a few limitations in this study; however, these limitations can be used to conduct future studies. First, other stated in Malaysia should be included in the study notably Sarawak, Johor, Penang and Sabah due to its high gross domestic product (GDP) per capita providing a broader based population leading to a comparative study between different states. It will also be important to conduct this study post Covid-19; as a longitudinal study. Variables such as trust, social factors, and cyber security may be included in this study in testing the relationship with intention to use e-wallets in Malaysia. The results of this study will promote appropriate policies that will enhance the use of e-wallets among Malaysians. The intervention of the Malaysian government and policy makers and professional bodies and the consumer association in creating awareness will amplify the usage of e-wallets in Malaysia.

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