

Factors Influencing Consumers' Behavioral Intention to Use Electronic Wallet: A Study of Touch 'n Go E-wallet

Ling Wei Aw¹, Ashwinytaah Raam², Auni Nadiah Binti Mohd Rizal³, Azra Parvin Binti Niyas Ali⁴, Fadhilah Khoiruwnia⁵, A A Gde Satia Utama⁶, Kok Ban Teoh⁷

Universiti Sains Malaysia^{1,2,3,4}

Airlangga University^{5,6}

ViTrox College⁷

Correspondence Email: awlingwei2000@gmail.com

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ABSTRACT

The growth of technology and implementation of the fourth industrial revolution, digital wallet payment methods have appeared as the latest wave in the market. People can now enjoy cashless payments with a simple tap of a button. Due to the Covid-19 pandemic, digital wallet use among consumers significantly increased. The purpose of this study is to analyze the factors affecting users' behavioral intention in using the electronic wallet (e-wallet)- Touch 'n Go E-wallet. The collection of both primary and secondary data is done through several sources, and a digital questionnaire was produced to collect data and information from 150 respondents. We tested hypotheses using IBM SPSS Statistic software. The result point out that the perceived usefulness, perceived convenience, perceived trust, and perceived security of the Touch 'n Go E-wallet application significantly influence consumer behavioral intention using the e-wallet payment method.

Keywords: Consumers' Behavioral Intention, Electronic-Wallet, Touch 'n Go E-wallet

INTRODUCTION

Recently, the pandemic, which acts as a double-edged sword globally, has discovered a perfect opportunity for e-wallet payment methods to optimize business achievement (Kee et al., 2021). The spread of coronavirus forced the global lockdown has compelled consumers to utilize the Internet and forge this habit in their daily lives (Abiad et al., 2020). E-wallet payment methods are becoming more common as they bring consumers convenience throughout the outbreak. The Covid-19 outbreak influenced the practice of consumers, making the payment inadequate. As aware, SARS-Cov2 was spread through droplets from infected people that land on the surfaces of objects nearby and are contacted by them (Ather, Patel, Ruparel, Diogenes, & Hargreaves, 2020). A cash is the most common medium in the marketplace and is highly possible to contact infected people. Thus, the WHO encourages using digital money in every transaction (Brown, Hentschel, Mettler, & Stix, 2020).

Touch 'n Go e-wallet is a leading online payment mobile application that supports several functions and features (Hussain, Mkpojiogu, Wahab, & Che Meh, 2021). Thus became the foremost digital payment that began in Malaysia. It is widely used for cashless payments or virtual currency utilized by smartphone users. Cashless transaction has become remarkably well-known, as the amount of request of the e-wallet is regularly escalate (Singh et al., 2020). It focuses on providing various online payment options such as transportation, financial services, bill payment and entertainment to fulfil consumers' demands and satisfaction. Its online payment options bring convenience to the consumers to enjoy the flexibility provided by the electronic transaction experiences as its mission is to provide secure, swift and convenient cashless payment mode to all (Touch 'n Go, 2022). Touch 'n Go e-wallet always provides high-quality digital payment services to maximize consumers' satisfaction and remain competitive. Hence, the Touch 'n Go e-wallet has continued to improve for its services provided in the degree of security to maintain the loyalty and trust of consumers towards it. Jayaseelan (2017) indicates that e-wallets can handle several functions and features, not only merchant payments. As a result, Touch 'n Go e-wallet has offered its services in around 550 thousand merchants around Malaysia and gathers approximately 16 million users.

Due to the industrial revolution 4.0 that the Malaysian government implemented, the e-wallet innovation support has strongly influenced the costumers' behavioral intention to use the e-wallet. Although some research are carried out on the individual willingness to use the Touch 'n Go e-wallet service, it is a scare on research on the factors influencing the consumers' behavioral intention. Thus, we convey this study to identify the primary factors influencing consumers' behavioral choice to use the Touch 'n Go e-wallet service. Consequently, the Touch 'n Go e-wallet users may better understand the essential factors in promoting and enhancing the consumers' behavioral intention to the Touch 'n Go e-wallet service.

LITERATURE REVIEW

Consumer Behavioral Intention

Behavioral intention is usually known as an individual possibility of steps or a consumer's willingness to utilize an upcoming system (Venkatesh, Brown, Maruping, & Bala, 2008). It can be summarized as a kind of purchase intention used to predict the consumers' behaviour. Based on Ajzen and Fishbein (1980), the consumer's behavioral intention to use e-wallet services measure the extent of an individual's desire to purchase goods and services through digital forms. Human characteristics or actions tend to be encouraged by emotions and thoughts, whether positive or negative. Psychologically, behavioral

intention refers to the expression of a promise to carry out an activity or sort of duty in the future. Besides, consumers' behavioral intention to technological acceptance may be estimated by similar qualities that influence the e-wallet intention, including perceived usefulness, perceived convenience, perceived trust and perceived security. The outbreak's interrelated provisions impacted users' of digital payment, internal and external and have influenced users' perception of the advantages of utilizing the e-wallet payment method upon the epidemic (Zhao & Bacao, 2021).

Perceived Usefulness in Consumer Behavioral Intention

Lwoga and Lwoga (2017) claimed that perceived usefulness is described as the amount to which the use of technology will positively impact the performance of particular activities from the viewpoint of consumers. If a technology is not practical, it is not recommended to be adopted no matter how good its attentive implementation work is. However, perceived usefulness may differ for each person (Murthy & Mani, 2013). Based on Teng, Ling, and Seng (2018), perceived usefulness positively influences consumers' behavioral intention to adopt e-wallet services. Then, Syarwani and Ermansyah (2020) said that perceived usefulness discovered the intention of users based on their attitudes. The findings implied that the portability of digital wallets in daily transactions encourages them to adopt e-wallet services compared with the physical wallet. Similarly, Yang, Mamun, Mohiuddin, Nawi, and Zainol (2021) claimed that the young generation in Malaysia showed a strong perceived usefulness to the e-wallet services because they find e-wallet services as time-saving tools. Hence, we consider the relationship between perceived usefulness and consumers' behavioral intention to use the Touch 'n Go e-wallet service.

H1: Perceived usefulness is significantly attributed to the consumers' behavioral intention to use the Touch 'n Go e-wallet service.

Perceived Convenience in Consumer Behavioral Intention

The rapid increase of network and smartphone technologies contributes to e-wallets evolution to become efficient and convenient for mobile payment solutions (Teng & Khong, 2021). Hence, consumers may reload money in advance through different channels such as Financial Process Exchange (FPX) or through debit or credit cards to their e-wallet to purchase online or offline payments anytime (Chawla & Joshi, 2019). As a result, consumers can purchase goods comfortably whether in their own home, office or anywhere. Electronic wallets make the payment method convenient for customers because it is available in most online e-commerce platforms and retail shops. Along with the vein, the following hypothesis has been constructed.

H2: Perceived convenience is significantly related to the consumers' behavioral intention to use the Touch 'n Go e-wallet service.

Perceived Trust in Consumer Behavioral Intention

Mutimukeye, Kolkowska, and Grönlund (2020) and Kolsaker, Kelley, and Choy (2004) said that perceived trust could significantly influence online transactions. Perceived trust is crucial in impacting the user perception in adopting the e-wallet because it decides to what degree the consumer can conquer the perspectives of uncertainty and risk to the e-wallet platform as they need to share personal information or make financial transactions (Seetharaman, Kumar, Palaniappan, & Weber, 2017). In online financial transactions, users always feel unconfident in transacting with e-vendors through the Internet due to a lack of physical interaction between both parties. According to Cabanillas, Fernandez, and Leiva (2018), trust urgency in the technology adoption is an element in improving relationships with the users. Ehrenhard, Wijnhoven, Broek, and Stagno (2017) confirmed that even merchants or consumers considered perceived trust a vital aspect determining the use of e-wallet services. Hence, researchers assume that

perceived trust has favorable connection with the consumers' behavioral intention to use the Touch 'n Go e-wallet service.

H3: Perceived trust is significantly related to the consumers' behavioral intention to use the Touch 'n Go e-wallet service.

Perceived Security in Consumer Behavioral Intention

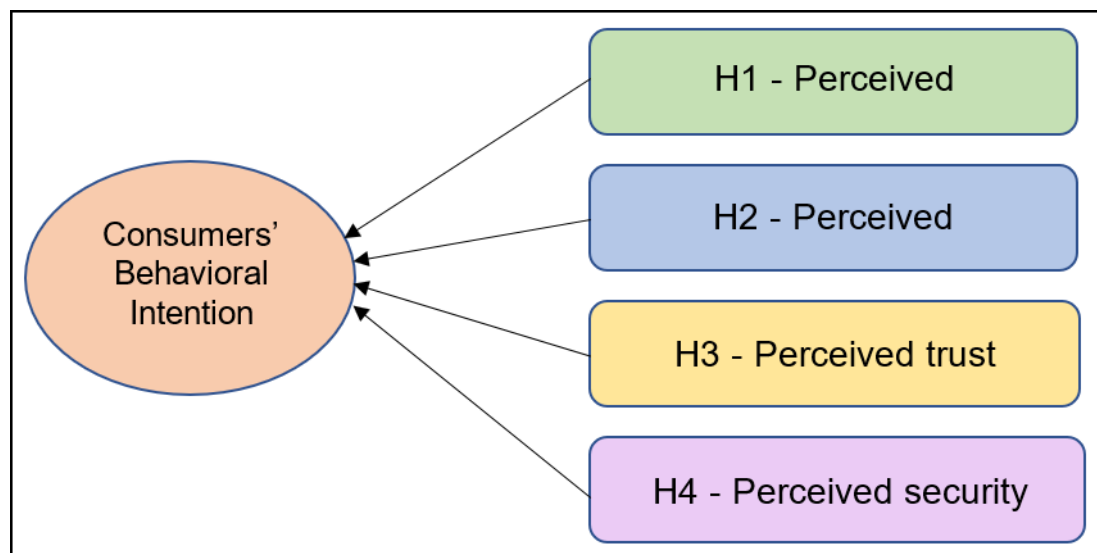
Even before the COVID-19 outbreak, cashless purchases were becoming the norm. Chawla and Joshi (2019) stated that perceived security is essential in influencing perceived trust. At the same time, the emphasis on the need to develop strategies to improve the confidence of perceived security for the older generation towards e-wallet services has been made by Chawla and Joshi (2020). The e-wallet transaction security has become the primary influencer in the consumers' behavioral intention (Seetharam et al., 2017). As a result, regardless of the users' age and gender, the perceived security of the e-wallet service significantly affects their intention to acquire the e-wallet services to create purchases. Thus, the study proposed to discuss the hypothesis.

H4: Perceived security is significantly related to the consumers' behavioral intention to use the Touch 'n Go e-wallet service.

RESEARCH METHOD

The theoretical framework guides the researchers to connect the factors and corresponds that need to be considered. Researchers have developed a framework to link perceived usefulness, perceived convenience, perceived trust, and perceived security to the consumers' behavioral intentions. Therefore, a Google form survey has been distributed to 150 Touch 'n Go e-wallet users to corroborate the model.

Figure 1. Research framework on factors Influencing consumers' behavioral intention to use Touch 'n Go Electronic Wallet



All of the data collected from the digital survey has been analyzed using IBM SPSS Statistics software to determine the significance and dependency of each variable.

Sample and Procedure

Researchers distributed a Google Form questionnaire through Whatsapp, Messenger, and Telegram in the middle of April 2022. The use of digital questionnaires has increased the effectiveness and efficiency of the data collection progress as it can distribute to

respondents around Malaysia. It is not bound by any time limit to allow respondents to respond anytime. Then, the spread of the coronavirus made the digital survey more appropriate since everyone is encouraged to avoid close contact. The survey mainly focused on 150 consumers who have experience on the Touch 'n Go e-wallet and different demographic characteristics. The data collected were evaluated using IBM SPSS Statistics software to determine the significance and dependency of each variable.

Measures

The Google Form questionnaire contains of three sections which include Demographic characteristics, Factors influencing consumers' behavioral intention to use Touch 'n Go e-wallet, and Consumers' behavioral intention to use the Touch 'n Go e-wallet in the future. The 5-Point Likert Scale has been used in sections (B) and (C) to admit the respondents to indicate their agreeableness with a statement. The 5 Point Likert Scale represented by 1 is strongly disagree to 5 as strongly agree.

Factors Influencing Consumers' Behavioral Intention to Use Touch 'n Go E-wallet

The 15-item scale has been implemented in this section to investigate the determinants influencing consumers' behavioral intention in using the Touch 'n Go e-wallet. The scale includes four variables. Perceived usefulness. There are 4 items to evaluate perceived usefulness. The example item is "Learning to use the e-wallet platform is easy for me". For Perceived convenience, there are 5 items to evaluate them. The example item is "The e-wallet payment method brings me convenience". There are 4 items to evaluate perceived trust. The example item is "The e-wallet platform is trustworthy". There are 2 items to evaluate perceived security, and the example item is "The e-wallet platform is secure to use".

Consumers' Behavioral Intention To Use The Touch 'N Go E-Wallet In The Future

The consumers' behavioral intention is the dependent variable in this analysis. The sample items include: "I intend to use the e-wallet payment method in the future" and "I support the use of the e-wallet payment method in the future".

RESULTS

The survey was collected from 150 respondents around Malaysia from different nationalities by digital. The data in every statement is prevalent to the vital analysis of the study. The survey targeted 150 respondents through social media. All of the 150 questionnaires were answered. However, five out of 150 targeted respondents are unqualified for the study due to the lack of user experience with the Touch 'n Go e-wallet application. Thus, about 145 responses were deemed valid to be used to conduct statistical analysis. The respondents' demographic characteristics summary has been stated in Table 1 below.

The demographic characteristics of respondents had summarized in Table 1. Every 145 respondents has experience using the Touch 'n Go e-wallet in their purchase. Based on Table 1, most of the respondents are female, 64.8%, while the remaining 35.2% are male. Among 145 respondents, there are 61 Malay respondents, 53 Chinese respondents, and the rest of 31 respondents are India. Most respondents are from Generation Z, which stands for 115 respondents, because younger generations are familiar with digital devices and always exposed themselves to technological conveniences by making payments with a finger tap. At the same time, Millennials and Gen X shared the same number of respondents, which is 15 (10.3%) each. For educational level, more than half of the respondents, represented by 99 respondents, obtained a bachelor's degree level, and 8 respondents obtained a master's degree level. In comparison, the educational

level of other respondents was represented by secondary school (20 respondents), Matriculation (1 respondent) and Diploma (17 respondents), respectively. Regarding respondents' monthly household income, slightly half (56.6%) of respondents are from the B40 group, while a minority of respondents (6.9%) are from the T40 group. The survey stated that most respondents had used Touch 'n Go e-wallet for two years or three years and above. Thus, it shows that the e-wallet payment methods have been familiar to users for at least three years.

Table 1. Respondents' Demographic Characteristics (N=145)

Response	Frequency	Percentage (%)
Gender		
Male	51	35.2
Female	94	64.8
Ethnicity		
Malay	61	42.1
Chinese	53	36.6
India	31	21.4
Age		
Age 10 – 25 (Gen Z)	115	79.3
Age 26 – 41 (Millennials)	15	10.3
Age 42 – 57 (Gen x)	15	10.3
Educational Level		
Secondary school	20	13.8
Matriculation	1	.7
Diploma	17	11.7
Bachelor's degree	99	68.3
Master's degree	8	5.5
Monthly Household Income		
RM 4,850 and below (B40)	82	56.6
RM 4,851 – RM 10,970 (M40)	53	36.6
RM 10,970 and above (T40)	10	6.9
Electronic Wallet Payment Method Prior Experience		
One year or less than a year	42	29.0
Two years	54	37.2
Three years or more than three years	49	33.8

Table 2. Descriptive Statistics, Cronbach's Coefficients Alpha, And Zero-Order Correlations of All Study Variables

Variable	1	2	3	4	5
Perceived usefulness	.877				
Perceived convenience	.716**	.882			
Perceived trust	.588**	.679**	.912		
Perceived security	.605**	.666**	.842**	.922	
Consumer's Behavioral Intention	.676**	.633**	.620**	.657**	.913
M	4.505	4.406	4.271	4.276	4.497
SD	2.347	3.093	2.890	1.620	1.387
N of item	4	5	4	2	2

** $p < .01$ level (2-tailed); $N = 145$; Diagonal entries in bold indicate Cronbach's coefficient alpha

The survey contain of 145 Touch 'n Go e-wallet service users related to the factors influencing consumer behavioral intentions. Four elements consist in the scale: Perceived usefulness, Perceived convenience, Perceived trust and Perceived security. Pearson Correlation Analysis is employ to perceived the relationship between the variables. In Table 2, it can be seen that all factors persevere greater than 0.80. Thus, the variables were tested by Cronbach Alpha which signify the internal consistency of 0.877, 0.882, 0.912, 0.922 and 0.913. The results suggested that the items for all the variables are reliable. According to Ursachi, Horodnic, and Zait (2015), an alpha between 0.6 – 0.7 suggested acceptable reliability, meanwhile an alpha of 0.08 and above signify excellent reliability. The overall variables exceed the 0.70 cut-off point examined as high reliability. The overall variables have a mean range of 4.00, suggesting that the respondents agree with the survey (value '4' on the Likert scale).

Table 3. Regression Analysis

Hypothesis	Standardized Beta	p-value
Perceived usefulness	.367***	.000
Perceived convenience	.127	.163
Perceived trust	.080	.461
Perceived security	.283*	.010
F value	43.311	
R Square	.564	
Adjusted R Square	.552	

*Note: N = 145; *p < .05 ***p < .0005. Dependent variable: Touch 'n Go Consumer Behavioral Intention*

In Table 3 the results of multiple regression analysis were presented. It is shown that all the independent variables are revealed collectively as R^2 of .564, to point out that all the independent variables can be evaluate 56.4% of the variance intentionally to measure the variables of Perceived usefulness, Perceived convenience, Perceived trust and Perceived security. The dependent variable entered is the consumer behavioral intention in this analysis.

As we can see on Table 3, the model consists of perceived usefulness, perceived convenience, perceived trust, and perceived security influencing the consumers' behavioral intention to use the Touch 'n Go e-wallet service. The p-value of perceived usefulness recorded at 0.000 lower than 0.05 indicates that perceived usefulness can be accepted as providing a positive impact on the consumers' behavioral intention to use the Touch 'n Go e-wallet. Perceived usefulness has a +.367 standardized beta, which signify a weakly positive relationship between perceived usefulness and the dependent variables. Besides, perceived convenience has a p-value of 0.163 excessive than 0.05, which is considered rejected. It recorded the standardized beta of +.127, indicating a positively small relationship. Furthermore, the perceived trust display p-value of 0.461 is far beyond 0.05; hence the independent variable will be rejected. The beta values of +.080 indicate that the perceived trust standard deviation increases by 80 to a single increase in standard deviation. Finally, perceived security show p-value of 0.01 is no more than 0.05 is accepted. The standardized beta of perceived security is +.283, which present a slight positive relationship between perceived security and the dependent variable. The regression analysis stated that perceived usefulness and perceived security are accepted as significant variables. Thus, only H1 and H4 are accepted as having a relationship positively with consumers' behavioral intention, considering that H2 and H3 were rejected.

DISCUSSION

Our research results show an improvement in the perception of interrelated factors that either motivate or dissuade the user from utilizing the proper Touch 'n Go e-wallet application. It contributes insights for its industry management to improve their strategies and remain competitive.

Perceived Usefulness

The study has illustrated a significant relationship positively on the perceived usefulness of the consumers' behavioral intention to use the Touch 'n Go e-wallet service. The application development based on consumers' reviews expands the perceived usefulness. The quality improvement of the technology systems extends the literature on the perceived usefulness of applications and websites (Kim & Niehm, 2009). Identically, an easy-to-use application carried the same characteristics, which require minimal effort to run its operation. According to Guriting and Ndubisi (2006), perceived usefulness tends to have a favourable relationship influencing the consumers' behavioral intention to digital payment usage in Malaysia.

Perceived Security

The study has disclosed a positive relationship between perceived security and the consumers' intention to use the Touch 'n Go e-wallet service. Thus, security concerns are usually recognized as authentication, confidentiality, non-repudiation and data integrity (Suh & Han, 2003). The previous study by Varsha and Thulasiram (2016) identified that perceived security is the primary factor influencing young consumers' intention to adopt e-wallets. The younger generation's major concern towards digital payments was the safety of money transactions (Kalra & Batra, 2016). Hence, this indicated that strengthening the Touch 'n Go e-wallet security will elevate users from adopting it. Most users perceived that the e-wallet system provided more secure and safe services than traditional payment methods. Thus, users showed their intention positively to adopt the Touch 'n Go e-wallet as it enhances the consumers' performance.

Perceived Convenience

The research found Touch 'n Go e-Wallet had provided an excellent service system, and most consumers agree with the convenience of using e-Wallets. From the results, the significant positive relationship between perceived convenience and consumers' behavioral intention on Touch 'n Go e-Wallet was that the consumer will use it frequently if the e-wallet is convenient. According to Berry, Seiders, and Grewal (2002), perceptions of convenience can influence consumers' intentions to use e-Wallets. For that reason, the Touch 'n Go payment method seems more convenient and could lead to consumers' satisfaction.

Perceived Trust

The research showed a positive impact on perceived trust in Touch 'n Go e-wallet service and the consumers' intention to use the service. Consumers should trust the technology to build confidence and feel more protected and secure. Any technology in relation to financial transactions always brings a significant concern to public trust (Prasad & Arivazhagan, 2021). Hence, perceived trust is interrelated to perceived security. Users who transact securely using the e-wallets will build up user trust and the willingness to continually use the technology (Kim & Niehm, 2009). The Touch 'n Go e-wallet user perceived the transaction service as highly secure, then unintentionally showed the user's trust towards the Touch 'n Go e-wallet service and their intention to use it.

CONCLUSION

According to the result, perceived usefulness, perceived convenience, perceived trust and perceived security are aspects that influence the utilization of the Touch 'n Go e-wallet application. However, only the perceived usefulness and the perceived security be the two factors that have the significant positive relationship to the consumers' behavioral intention. Hence, the hypothesis H1 and H4 has been accepted, meanwhile the hypothesis H2 and H3 have been rejected. The results provided a better understanding of the use of the Touch 'n Go e-wallet service toward the consumers' behavioral intentions. Thus, the perceived usefulness and perceived security of the Touch 'n Go e-wallet significantly impacted the users' adoption as it enhanced the individual performance and user experience to affect the consumer behavioral intention.

However, the limitation can be found in the research. The survey questionnaire was not widely spread that only limited to certain areas in Malaysia. The analysis may differ if the questionnaire could ideally spread through all states in Malaysia. It is because different cultures and lifestyles in states over Malaysia may significantly impact the reliableness of digital payments method on the spending behavior of consumers.

Hence, future researchers are suggested to conduct a broader population in a sample involving more areas and states in Malaysia to expand the study's accuracy. Moreover, consumers' loyalty and satisfaction are encouraged to be added as the elements to be examined over the consumer behavioral intention to use Touch 'n Go e-wallet service by future researchers. Other than that, future research is recommended to use the Structure Equation Model (SEM-AMOS) in the data analysis to strengthen the reliability and validity of the data.

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DECLARATION OF CONFLICTING INTERESTS

The authors declare that there is no conflict of interest.

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