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E-Payment Transaction and Consumer Behaviour: A Study of Touch 'n Go e-Wallet During the COVID-19 Pandemic in Malaysia

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ABSTRACT

The COVID-19 pandemic changed how people do things and reframed buyer perceptions. Malaysians have been urged to utilize e-Wallets instead of paper money in their daily transactions as a precautionary measure against health threats. Previously, Malaysians perceived e-Wallets as inconvenient and pointless. With the implementation of MCO (Movement Control Order), CMCO (Conditional Movement Control Order) and RMCO (Recovery Movement Control Order) by the government to stop the spreading of the COVID-19 virus, Malaysia started unlocking the e-Wallet emerged as a new normal for consumers. This study aims to examine the consumers' behavior regarding the use of Touch 'n Go e-Wallet during the COVID-19 pandemic in Malaysia. The study employed a quantitative method of research while a questionnaire was used to elicit information from the respondents. This survey was completed by a total of 150 respondents through an online survey, which is on the Google Form. The results are expected to provide insight into the users' preferences and satisfaction with Touch 'n Go e-Wallet.

Keywords: Consumer Behaviour, Consumer Satisfaction, COVID-19 Pandemic, E-Payment Transaction, E-Wallet, Malaysia, Touch 'n Go (TNG)

INTRODUCTION

Malaysia had a significant increase in using e-payment to purchase goods and services, mainly for e-commerce transactions during the Covid-19 pandemic. The e-payment through digital platforms has led to e-commerce growth, which the COVID-19 pandemic has driven. Coronavirus disease 2019 (COVID-19) was not expected to influence global growth, economics, and social behavior. However, the pandemic has caused significant impacts in various areas throughout the world. The people's routine was eventually forced to be stopped due to the widespread disease. E-wallets' virtual and contactless nature has made them a popular payment platform

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in a period when movement restrictions as people are concerned about their health when going out during the pandemic (Kee et al., 2022).

Consumer behavior is the process through which customers make buying behaviors online. Behaviors, including purchasing, continuously change based on the demands and needs. Consumption and consumer behavior are significant in society, especially when COVID-19 pandemic. This study provides an in-depth review of consumer behavior toward Touch 'n Go (TNG) e-Wallet during the pandemic in Malaysia.

Touch 'n Go e-Wallet started in July 2017 as a modern electronic wallet service and digital payment platform (Bates, 2022). Touch 'n Go's contactless payments enabled Malaysians to make retail transactions and pay for public transportation and parking spots (CompareHero, 2021). Touch 'n Go joined mobile payments in 2009 through FastTap with Maxis. It let Customers of Maxis will be required to make payments via Touch 'n Go. The system of payment employed near-field communication (NFC), allowing the consumer to touch their phones to card scanners, which accept credit cards, debit cards, and Touch 'n Go cards. The Nokia 6212 Classic was supported. The service failed because consumers did not easily embrace it. With CIMB and Maxis, Touch 'n Go is developing an NFC-based online transaction solution. This will make it possible for consumers to use NFC to pay for a variety of goods and services.

Touch 'n Go e-Wallet came out before working with Ant Financial. Payments were made using QR codes instead of NFC technology. In the early version of the app, users could replenish bill payments, prepaid service bills, purchase movie and airline tickets, debit or credit the money from or to friends and family and make payments ut only in a limited region. After some development, e-Wallet can be funded using JomPay, debit cards, credit cards, and Touch 'n Go reload PINs (Lee, 2022). The next year saw growth. Touch 'n Go e-Wallet, Boost, and GrabPay were all eligible for RM30 as part of the E-Tunai Rakyat programme, which is part of Malaysia's Budget 2020 plan to encourage cashless and mobile payments (Wong, 2022a). Now, Touch 'n Go includes DuitNow features. This Malaysian electronic transaction enables Touch 'n Go e-Wallet money to be moved to competitor services. It also allows users to pay merchants using a single uniform DuitNow QR code, which other e-Wallet applications may also accept (Wong, 2022b). During the outbreak of Covid-19 pandemic and the implementation of MCO, the demand for Touch 'n Go e-Wallet and other competing e-Wallet services has increased. Contactless payments will help the consumer in using the feature.

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Product Features

Product features refer to characteristics of a product and its specialties that can attract consumers in the market. Features are used as a dynamic instrument to distinguish between products or services and those of competing firms (Ramli, Hariani, Hamzah, & Usman, 2020). Touch 'n Go was first introduced to Malaysians in the 1990s to pay tolls electronically with a Touch 'n Go card. In 2017, Touch 'n Go expanded its business line by launching Touch 'n Go e-Wallet with its innovative and favorable functionality. Since then, Touch 'n Go has provided numerous rewards to embolden the usage of e-payment transactions among Malaysians, especially during the pandemic period. It enables consumers to make mobile reloads anytime, make contactless purchases of goods and services, and pay utility bills. With its innovative and enhanced technology, we can see that it has the second-highest mobile wallet market share, 36.2%, among the outstanding mobile wallet applications (Liivak, 2021). We believe that people are attracted to using Touch 'n Go e-Wallet for various purposes, notably during the pandemic, due to its usefulness and convenience.

Convenience Perceptions

Convenience perceptions are one of the critical factors in consumer intention and use of NFC technology. Raman (2019) found transactions' convenience is a key factor in developing good views among consumers and predicting their desire to buy online. The convenience of the Touch 'n Go e-Wallet payment method will let its users focus on more things without worrying about where to put their credit or debit card, calculate change or wait in line as there are no cash transactions. It allows its users to make super-fast, simple, and secure payments quickly and easily, without hassle. Consequently, this contactless payment method with new technology allows them to spend less time and more time alone with friends and family.

Malaysians are embracing the new, contactless convenience of TNG e-Wallet. The convenience is making shopping faster and easier, thus making life more convenient for Malaysians specifically e-Wallet users. Touch 'n Go e-Wallet is perfect for an increasingly time-poor lifestyle. Nadhira (2021) stated that e-Wallet users find e-Wallet easy to use, user-friendly, clear, and understandable, which are factors that can measure how satisfied they are with it. In recent days, Touch 'n Go e-Wallet has added the 'DuitNow Transfer' feature to its e-Wallet for a more seamless experience. Apart from the new feature, users can activate PayDirect feature for a variety of functions. For instance, users' cards can be linked to each other to their Touch 'n Go e-Wallets using PayDirect, where the back-end systems will deduct a user's e-Wallet balance, while the cards are used for normal toll payments.

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Perceived Trust

Perceived trust is a factor of technology as it permits merchants to create a strong consumer base relationship (Reichheld & Schefter, 2000). The term "perceived trust" refers to an emotional condition state in which one is encouraged to trust another based on the other's good behavior. Touch 'n Go e-Wallet users' personal and financial information should be monitored. A PIN protects Touch 'n Go e-Wallet while entering the app and making a payment (PIN). We observe that Touch 'n Go e-Wallet does not provide alternative forms of authentication for its users than a personal identification number (PIN). Touch 'n Go should implement an OTP requirement whenever there is a new device login on e-Wallet. Logging into new devices with an OTP requirement would deter attackers in a big way. As per Kim , Kim, and Park, (2017), perceived trust (PT) also important in forecasting the buyer's intention by lowering perceived risk throughout the duration of the transaction.

Consumer Satisfaction

Consumer satisfaction is the customer's overall assessment of a brand and is one of the most important keys to its profitability. It plays an important role in maintaining customer loyalty, increasing sales, and resisting competition. As consumers are at the center of the company's value chain, it is vital that they are satisfied with their experience. With product features, perceived trust, and rewards offered by using the Touch 'n Go e-Wallet, the level of consumer satisfaction will depend on these factors. To be more specific, most Malaysian users agree that Touch 'n Go e-Wallet successfully delivered them a pleasant shopping experience during the COVID-19 pandemic. Major retailers are increasingly using e-Wallets due to the security, efficiency, and additional utility they provide to end-users, which increases their satisfaction with their purchases.

Consumer Intention

The intention to use an e-Wallet to gauge one's desire to buy a product (Fishbein & Ajzen, 2011). The demand for e-Wallet services is growing during this severe climate crisis. The primary objective of this study is to identify the factors that influence consumers' continued intention to use e-Wallet services, especially during the COVID-19 pandemic. During the pandemic, Shaizatulaqma, Fakhrul, Ali, and Zhang (2021) discovered that e-Wallet services have a major impact on consumer intention to use e-Wallet services. Product features, convenience, perceived trust, and consumer satisfaction positively influence consumer intention to use e-Wallet services.

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Relationship between Product Features and Consumer Intention to Use TNG e-Wallet

Product features are the characteristics of the product that can persuade consumer behavior by using or applying the product or services (Kotler & Armstrong, 2007). Product features are the distinguishing characteristics of a good or service that showcase the differences between the competitors on the same products or services (Muhamad Radzi, Md Isa, Abd Rashid, Abu Samah, & Ramlan, 2021; Raja, Ramachandra & Busch, 2020). Young adults are more receptive to new technology and innovation features with short adoption curves. As a result, they can adopt new technology faster than other age groups. It was proved in the survey conducted by the Malaysian Communications and Multimedia Commission (2012). Users of e-Wallets are primarily young people who value the features of e-Wallets that offer extra rewards such as cashback, free vouchers, and discounts. According to the research, all e-Wallet users agree that e-Wallets provide them with a variety of offers, while 94.45 percent are happy with the services from e-Wallet providers (Akhila Pai, 2018). In other words, product features can influence consumer intentions and consumption. Thus, based on this discussion, the following hypothesis is formed:

H1: Product features have a positive relationship with consumer intention to use Touch 'n Go e-Wallet.

Relationship Between Convenience Perceptions and Consumer Intention to Use TNG e-Wallet

Convenience is anything that saves or simplifies work while improving ease or comfort. A strong preference for convenience increases demand for products or services that the consumer perceives to fulfil the consumer's convenience consumption strategy (Yale & Venkatesh, 1986). Consumers usually adopt a more convenient good or service because it does not require much time or energy from them. It was proven in the qualitative study on consumer convenience in the service industry conducted by Berry, Seiders, and Grewal (2002). Consumer perceptions of effort and time required for the purchase or usage of a service are referred to as service convenience. The perceived level of service convenience has a powerful impact on consumer behavioral intentions (Aagja, Mammen, & Saraswat, 2011). Yo et al. (2021) reported that perceived convenience is positively related to online customer satisfaction, while Kee et al. (2022) and Mombeuil and Uhde (2020) found that relative convenience influence positively consumer intention to use e-Wallets or e-Payments. Therefore, we can conclude that convenience perceptions play one essential role in determining the consumer intention to use e-Wallets. As such, we hypothesized:

H2: Convenience perceptions have a significant relationship with the consumer's desire to use the Touch 'n Go e-Wallet.

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Relationship Between Perceived Trust and Consumer Intention to Use TNG e-Wallet

Trust is crucial for an online business because it is riskier than physical retailers. Trust is an accurate determinant of customer behavior and intent to use. Electronic business organizations should build consumer trust to benefit the business (Gefen, Karahanna, & Straub, 2003). Consumers will develop trust in a service provider, and they will continuously consume them in their daily purchases. However, once they lack trust, consumers will not select to use electronic commerce. Thus, trust is an essential antecedent of the consumer's intention to use. According to Sullivan and Kim (2017), consumer trust can develop by lowering the potential risk in an online system. It will tend to attract consumers to repurchase intention on e-commerce. Therefore, perceived trust is necessary for predicting a consumer's purchase intention (Kim et al., 2017). Perceived trust is crucial in a mobile payment system and increases electronic business profits (Wong & Mo, 2019). To summarize, trust is essential in determining the intention to use consumers (Pengnate & Sarathy, 2016). The next hypothesis is formed based on this discussion:

H3: Perceived trust has a positive relationship with consumer intention to use Touch 'n Go e-Wallet.

Relationship Between Consumer Satisfaction and Consumer Intention to Use TNG e-Wallet

Consumer satisfaction is the comparison between the consumer expectation to accept the product or service and consumer perceptions after receiving the product or service (Richard, 1993). In electronic commerce, consumer satisfaction is critical for successful business relationships (Kim, Ferrin & Rao, 2009). e-Wallet transactions provide customers with some level of reliability, quality, satisfaction, and protection in transactions conducted elsewhere and at any time (Liébana-Cabanillasa, Molinillo, & Ruiz-Montañez, 2017). Consumer satisfaction is the consumer expectation or reflection towards the service provider. Consumer satisfaction will influence their intention to use a product or service. Users will not want to use an electronic wallet if they are dissatisfied with it (Zhou, 2012). As a result, the more satisfied consumers are with the Touch 'n Go e-Wallets, the more potentially they will use e-Wallets. Due to these findings, the following hypothesis is formed:

H4: Consumer satisfaction has a positive relationship with consumer intention to use Touch 'n Go e-Wallet.

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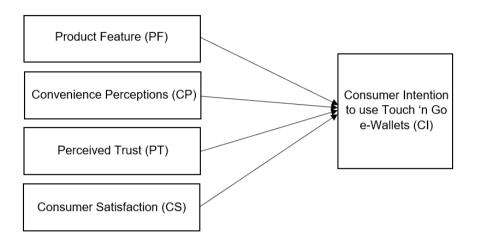


Figure 1. Our Research Model

Figure 1 is the framework used to conduct this study. The independent variables are product features, convenience perceptions, perceived trust, and consumer satisfaction. Consumer Intention to use Touch 'n Go e-Wallet is the dependent variable of the study.

RESEARCH METHOD

This study will take a qualitative and quantitative approach. We conducted a survey to collect primary data from 150 Malaysian respondents. The survey form was disseminated to our respondents from 26 April 2022 to 20 May 2022. During the COVID-19 pandemic in Malaysia, the researchers used the survey to discover respondents' preferences for e-Payment transactions and their behaviors toward the Touch 'n Go e-Wallet service. Before further analysis, the frequency and percentages of the survey data were calculated and displayed in table form. In addition, secondary data was gathered from literature, journals, and other online sources to support the data inferences made.

RESULTS AND DISCUSSION

Table 1. Summary of Respondent's Profile (N=150)

Construct	Frequency	Percentage (%)
Demographic Profile: Gender		
Male	56	37.3
Female	94	62.7

Nationality		
Malaysian	147	98
Non-Malaysian	3	2
Ethnicity		
Malay	61	40.7
Chinese	52	34.7
Indian	33	22.0
Siamese	3	2
Iban	1	0.7
Age		
15-25	115	76.7
26-41	25	16.7
42-57	9	6
58-76	1	0.7
Education Level		
High School	6	4
Pre-University	26	17.3
Bachelor's Degree	110	73.3
Master's Degree	2	1.3
PhD	2	1.3
Foundation / Diploma	4	2.7
Current Employment Status		
Student	111	74
Employed	33	22
Not employed	4	2.7
Retired	1	0.7
Housewife	1	0.7
Monthly Household Income	1	
RM4,850 and below (840)	66	44
RM4,851- RM10,970 (M40)	75	50
RM10,971 and above (T20)	9	6
Consumers' Familiarity:		
Are you a Touch 'n Go e-Wallet user?		
Yes	132	88
No	18	12
How often do you use Touch 'n Go e-Wallet in a month		
1-3 times	31	20.7
4-6 times	49	32.7

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7 times or above	50	33.3
None	20	13.3

Table 1 summarizes the respondent's profiles in this research. The majority of those who responded were women (62.7%), while the remaining 37.3% were male respondents. In terms of nationality, most of the respondents (98%) are Malaysians, with the remaining 2% being non-Malaysians. Furthermore, most respondents (40.7%) are Malays, followed by 34.7% Chinese and 22% Indians. The survey also received responses from 2% of Siamese and 0.7% of Iban people. Half of the respondents are between the ages of 15 and 25, 76.7% and around 16.7% are from 26 years and above. A total of 73.3% of the respondents are now pursuing bachelor's degrees. Both Master's degree and PhD education level have the same percentage of respondents, which are 1.3%, respectively. Also, 4% and 17.3% of respondents were in the education level of high school and pre-university, respectively. The remaining 2.7% of the respondents were at foundation or diploma education level. Based on Table 1, most respondents are students with current employment status (74%). Employed status is the second-highest percentage (22%) under current employment status, while the rest were not employed status (2.7%), retired, and housewife employment status (0.7%), respectively. Half of the respondents (50%) fall into the M40 category, with a monthly household income ranging from RM4,851 to RM10,970. Besides, 44% of the respondents were under the B40 category, whose monthly household income is RM4,850 and below. The remaining 6% were those T20 categories who earn RM10.971 and above per month. In addition, the percentage of respondents using TNG e-Wallet and the percentage of the frequency of usage of TNG e-Wallet in a month represents consumers' familiarity. Furthermore, 88% of respondents are TNG e-Wallet users, and the remaining 12% are not TNG e-Wallet users. Most respondents (33.3 %) use TNG e-Wallets more than seven times per month, and some agree that TNG e-Wallets have fascinated their interest over other payment methods. A total of 32.7% of respondents used the TNG e-Wallet 4 to 6 times per month. Only 20.7% of the respondents responded that they used TNG e-Wallets once to three times each month. However, 13.3% of respondents have never used TNG e-Wallets since some prefer electronic bank transfers or cash payments.

Table 2. Descriptive Analysis, Cronbach's Coefficients Alpha, and Zero Order Correlations Test All Study Variables

Variable	1	2	3	4
1. Product Features (PF)	0.946			
2. Convenience Perceptions (CP)	0.868**	0.969		

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3. Perceived Trust (PT)	0.838**	0.816**	0.915	
4. Consumer Satisfaction (CS)	0.877**	0.867**	0.904**	0.971
5. Consumer Intention to use Touch 'n Go e- Wallets (CI)	0.852**	0.868**	0.834**	0.881**
Number of Items	3	3	3	3
M	13.47	13.90	13.05	13.47
SD	2.228	2.194	2.600	2.325

Note. N= 150; **Correlation is significant at the 0.01 level (2-tailed); Diagonal entries in bold indicate Cronbach's coefficient alpha.

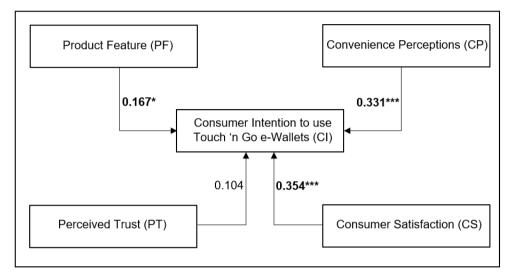
Table 2 displays descriptive statistics for the study's five variables, which include scale characteristics and the relationships between the number of items, mean, standard deviation, Cronbach's coefficients alpha, and correlation. According to our findings, the five variables exhibit adequate internal consistency reliability, with coefficient alpha values ranging from 0.915 to 0.971. The standard deviation of the five variable groups ranges from 1.414 to 2.600.

Table 3. Summary of Regression Analysis

Variables	Consumer Intention to Use Touch 'n Go e- Wallets
Product Features (PF)	0.167*
Convenience Perceptions (CP)	0.331°*
Perceived Trust (PT)	0.104
Consumer Satisfaction (CS)	0.354***
R2	0.828
F Value	174 .612
Durbin-Watson Statistic	2.039

Note. N = 150; •p < 0.05; ••p < 0.01; •••p < 0.001.

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Note: *p < 0.05; **p < 0.01; ***p < 0.001.

Figure 2. Our Hypothesized Model

Table 3 indicates regression analysis tested in SPSS Statistics software for the research. Multiple regression was used to determine the relationship between the independent and dependent variables. Independent variables in this study are product features (PF), convenience perceptions (CP), perceived trust (PT), and consumer satisfaction (CS). The dependent variable in the study is consumer intention to use TNG e-Wallets (CI). Figure 2 illustrates the summary of our hypothesized model. Based on Table 3 and Figure 2, we discovered that H1, H2, and H4 are supported, which are product features, convenience perceptions, and consumer satisfaction, which have a positive correlation to the consumer intention to use TNG e-Wallets with the beta value 0.167, 0.331, and 0.354, respectively. Two dominant variables influencing consumer intention to use TNG e-Wallets are convenience perceptions (CP) and consumer satisfaction (CS). Consumer satisfaction (CS) has the highest beta value of 0.354, followed by convenience perceptions with a beta value of 0.331. However, the findings indicate that perceived trust (PT) has no significant linked with consumer intention to use TNG e-Wallets. This variable has the least beta value, which is 0.104 and the p-value is greater than 0.05, which is 0.209. As a result, H3 is not supported. The R2 for this model is 0.828, indicating that 82.8% of the variance in the consumer intention to use TNG e-Wallets can be decoded by these independent variables.

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Table 4. Results

Hypotheses	Supported/ Not Supported
H1: Product features have a positive relationship with consumer intention to use Touch 'n Go e-Wallet.	Supported
H2: Convenience perceptions have a significant relation with the consumer's desire to usage the Touch 'n Go e-Wallet.	Supported
H3: Perceived trust has a positive relationship with consumer intention to use Touch 'n Go e-Wallet.	Not Supported
H4: Consumer satisfaction has a positive relationship with consumer intention to use Touch 'n Go e-Wallet.	Supported

Table 4 summarizes our study results. The study result indicates that the features of a product positively correlate with the consumer intention to use Touch 'n Go e-Wallets. Product features are specific attributes of a product that differentiate it from similar products in the market and provide substantial value to customers (Ohri, 2021). Some researchers agree that product feature is essential, and it has a direct impact on consumer intention to use. For example, in the research of Ramli et al., the study's findings revealed that the independent variable of features influences the intention and decision to use the digital payment application. Current researchers discovered that since the visual appeal of e-Wallets is comparable to other similar e-Payment applications, consumers are more likely to search for the features of e-Wallets that are more generally familiar. It will ease them to use it continuously without wasting their time and effort in understanding it. The researchers also proposed many strategies to increase e-Wallet users' continuation intention in using e-Wallets, including introducing new features in e-Wallet apps (Abbasi, Sandran, Ganesan, & Iranmanesh, 2021). It was discovered that product features significantly influence consumer intent to use a product or service. Surveys were used to gather evidence on the impact of product features on customer intentions to utilize products or services (SurveyMonkey, 2022). From an e-commerce perspective, product features are an important variable for developing a product or service to encourage the adoption and continued usage of the technology (Matemba & Li, 2017).

Our findings indicate that convenience perception has a positive relationship and is another important variable influencing consumer intention to use Touch 'n Go e-Wallets. Convenient access to mobile payment technology has been shown to impact the consumer's behavioral intention of adoption (Matemba & Li, 2017). Past researchers alerted the e-Wallet providers to prioritize convenience perceptions because when it is easier to use a product or service, the impact advances on consumer behavioral intention to use (Karim, Haque, Ulfy, & Hossain, 2020). Based

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on several discussions of previous studies, past researchers invented the phrase convenience to describe the time and effort an individual expended to get a service or acquire a product (Copeland,1923). According to Benoit, Klose, and Ettinger (2017), consumers value the convenience and speed of a service or product when consumers are completing transactions. Ray, Dhir, Bala, and Kaur (2019) conveyed that convenience perception is the driver in determining a better customer attrition rate. As a result, based on the findings of previous studies, most researchers believe that convenience perceptions can positively influence consumer intention.

In addition to product features and convenience perceptions, consumer satisfaction is another dominant variable that positively influences the consumer intention to use Touch 'N Go e-Wallet. Prasad and Pasupathi (2019) confirmed that users' satisfaction levels would influence the usage of e-Wallets. They have clearly defined the various level of satisfaction experienced by the respondents from the facility provided by the e-Wallets' service providers, which has increased the usage of e-Wallets. Liébana-Cabanillas et al. (2019) discovered that satisfaction is the significant driver in determining users' intention to use Near Field Communication (NFC) mobile payment systems. Abdul-Halim, Vafaei-Zadeh, Hanifah, Teoh, and Nawaser (2021) added that consumer satisfaction would directly impact the continued intention to use e-Wallets in Malaysia. They bolstered their research by employing the expanded Technology Continuance Theory (TCT). Lin et al. (2019) concluded that consumer intention to use mobile payment technology (m-payment) is linked positively to users' satisfaction.

The finding also suggested that perceived trust has no significant correlation with consumer intention to use Touch 'n Go e-Wallets. It was against past research on perceived trust. For example, Nidhi and Neena (2020) claimed that perceived trust directly impacts consumers' behavioral intention to utilize mobile wallet technology. Another study by Hayashi and Bradford (2014) revealed that trust is essential in adapting a mobile payment service. Trust will significantly influence user intention due to different safety issues linked with the service. However, some researchers proved that perceived trust does not correlate with consumer intentions to use e-Wallets because the outcomes from the study regarding perceived trust differ based on linked purpose (Yang & Mossholder, 2010). Based on Abdul-Halim et al. (2021), the findings indicate that continued usage of an e-Wallet is unaffected by trust. The researchers argued that those circumstances happened because some young consumers lack knowledge about security issues, and knowledgeable consumers also will get tricked since it needs additional safety concerns. Thus, we can conclude that H3 is not supported because trust is insignificant toward consumer intention to use e-Wallets.

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CONCLUSION

Our research is conducted to gauge the perceptions of consumers towards Touch 'n Go e-Wallet service from various aspects. Through this research, product features, convenience, and consumer satisfaction are the top three dominant factors other than perceived trust, that contribute to the consumer's intention to use Touch 'n Go e-Wallet service. The questionnaire gives us insight into the level of satisfaction, and we can conclude that there are four hypotheses which have been constructed from the research framework. Besides that, this study found that Malaysians choose the Touch 'n Go e-Wallet service since it makes transactions simple and convenient. In short, Touch 'n Go provides a system that enables more convenience and easy payment by simply using their phone or other mobile devices.

LIMITATION

There are two significant limitations in this study that could be addressed in future research. The main limitation to generalizing the findings is time constraints. The recent pandemic has challenged researchers with limited time and resources. In our study, we conducted our survey online using Google Forms. The limitation is that we had to acquire hundreds of responses within a short period. This research, however, has expanded the understanding of e-Wallet consumer behavior. Second, we encountered challenges in locating suitable and related research to support our third hypothesis, which is about the relationship between perceived trust and consumer intention to use e-Wallets. Since our findings did not support our study hypothesis and contradicted previous research, we just limited with few resources and information to support the study findings. Many studies on the insignificant relationship between perceived trust and consumer intention to use e-Wallets should conduct to aid future research.

REFERENCES

- Aagja, J. P., Mammen, T. & Saraswat, A. (2011). Validating service convenience scale and profiling customers: A study in the Indian retail context. *Vikalpa*, 36(4), 25-49.
- Abbasi, G. A., Sandran, T., Ganesan, Y., & Iranmanesh, M. (2022, February 23). Go cashless! determinants of continuance intention to use E-wallet apps: A hybrid approach using PLS-SEM and fsQCA. *Technology in Society, 68* 101937. https://doi.org/10.1016/j.techsoc.2022.101937
- Abdul-Halim, N. A., Vafaei-Zadeh, A., Hanifah, H., Teoh, A. P., & Nawaser, K. (2021). Understanding the determinants of e-wallet continuance usage intention in Malaysia. *Quality & Quantity, 56*, 3413–3439. https://doi.org/10.1016/j.techsoc.2022.101937

- Akhila Pai H. (2018, August 12). Study on consumer perception towards digital wallets. *International Journal of Research and Analytical Reviews*, *5*(3), 385-391.
- Bates, C. (2022). Touch 'n Go gets greenlight to create a new mobile wallet platform with AliPay. SoyaCincau. Retrieved May 20, 2022, from https://soyacincau.com/2017/11/15/touch-n-go-gets-greenlight-to-create-anew-mobile-wallet-platform-with-alipay
- Benoit, S., Klose, S., & Ettinger, A. (2017). Linking service convenience to satisfaction: Dimensions and key moderators. Retrieved from https://openresearch.surrey.ac.uk/view/pdfCoverPage?instCode=44SUR_I NST&filePid=13140638140002346&download=true
- Berry, L. L., Seiders, K., & Grewal, D. (2002). Understanding service convenience. *Journal of Marketing*, 66, 1-17.
- CompareHero. (2021, January 26). *Touch 'n Go Card: Where to buy Touch 'n Go Card in Malaysia and use them.* Retrieved May 20, 2022, from https://www.comparehero.my/transportation/articles/use-touch-n-go-card.
- Copeland, M. (1923). Relation of consumers" buying habits to marketing methods. *Harvard Business Review*, *1*, 282-289.
- Fishbein, M. and Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach*. London: Psychology Press.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003, March). Trust and tam in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51-90.
- Hayashi, F., & Bradford, T. (2014). *Mobile payments: Merchants' perspectives*. Retrieved from https://www.kansascityfed.org/documents/1374/2014-Mobile%20Payments:%20Merchants'%20Perspectives.pdf
- Jimoh, A. L., & Kee, D. M. H. (2020). Talent retention and job performance: The role of perceived organizational support. *Journal of Critical Reviews*, 7(16), 396-404.
- Karim, M. W., Haque, A., Ulfy, M. A., & Hossain, A. (2020). Factors influencing the use of E-wallet as a payment method among Malaysian young adults. *Journal of International Business and Management*, 3(2), 1-12.
- Kee, D. M., Ow, A. L., Ooi, Z. J., Sathiaseelan, P., Pang, K., KA, S., & Madhan, S. (2022). Have you touched? A case study of Touch n Go eWallet. *International Journal of Accounting & Finance in Asia Pasific, 5*(1), 84-94.
- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2009). Trust and satisfaction, two stepping stones for successful e-commerce relationships: A longitudinal exploration. *Information Systems Research*, 20(2), 237-257.
- Kim, S. Y., Kim, J. U., & Park, S. C. (2017, December 7). The effects of perceived value, website trust and hotel trust on online hotel booking intention. Retrieved June 16, 2022, from https://www.mdpi.com/2071-1050/9/12/2262
- Kotler, P., & Armstrong, G. (2007). Principles of Marketing. Kent, OH: Prentice Hall.

- Lee, R. (2022). Touch N Go's mobile payment system uses QR codes instead of NFC. Retrieved May 20, 2022, from https://soyacincau.com/2017/02/22/touch-n-go-wallet-mobile-payment-system-uses-qr-codes-instead-of-nfc/
- Liébana-Cabanillasa, F., Molinillo, S., & Ruiz-Montañez, M. (2019). To use or not to use, that is the question: Analysis of the determining factors for using NFC mobile payment systems in public transportation. *Technological Forecasting and Social Change*, 139, 266-276. doi:10.1016/j.techfore.2018.11.012
- Liivak, M. (2021). *Mobile wallets spotlight: Malaysia*. Retrieved May 29, 2022, from https://fortumo.com/blog/mobile-wallets-spotlight-malaysia/
- Lin, C. W., Lee, S. S., Tang, K. Y., Kang, Y. X., Lin, C. C., & Lin, Y. S. (2019). Exploring the users behavior intention on mobile payment by using TAM and IRT. *Proceedings of the 2019 3rd International Conference on E-Society, E-Education and E-Technology* (pp.11-15).
- Malaysia Communications and Multimedia Commission. (2012). Statistical brief number fourteen: Hand phone users survey 2012. Retrieved May 29, 2022, from https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/130717_HPUS 2012.pdf
- Matemba, E. D., & Li, G. (2017). Consumers' willingness to adopt and use WeChat wallet: An empirical study in South Africa. *Technology in Society, 53, 55-68.* doi:10.1016/j.techsoc.2017.12.001
- Mombeuil, C., & Uhde, H. (2020, November 27). Relative convenience, relative advantage, perceived security, perceived privacy, and continuous use intention of China's WeChat Pay: A mixed-method two-phase design study. *Journal of Retailing and Consumer Services*, 59, 102384.
- Muhamad Radzi, W. N. W., Md Isa, E. V., Abd Rashid, I. M., Abu Samah, I. H., & Ramlan, S. N. (2021). The impact of latest product features advanced technology on intention to purchase Android smartphones users. *AIP Conference Proceedings*. doi:10.1063/5.0046100
- Nadhira, A. F. (2021). *Analysis of factors affecting customer satisfaction: study on e-wallet services*. Retrieved from http://eprints.ums.ac.id/92520/11/NASKAH%20PUBLIKASI.pdf
- Ohri, A. (2021, March 19). What are product features? A simple overview (2021).

 Retrieved May 29, 2022, from https://www.jigsawacademy.com/blogs/product-management/product-features
- Pengnate, S. (F)., & Sarathy, R. (2016). An experimental investigation of the influence of website emotional design features on trust in unfamiliar online vendors. *Computers in Human Behavior*, 67, 49-60. https://doi.org/10.1016/j.chb.2016.10.018

- Raman, P. (2019). Understanding female consumers' intention to shop online: The role of trust, convenience and customer service. *Asia Pacific Journal of Marketing and Logistics* 31(4), 1138-1160. doi:10.1108/APJML-10-2018-0396
- Raja, K., Ramachandra, R., & Busch, C. (2020). Collaborative representation of blur invariant deep sparse features for periocular recognition from smartphones. *Image and Vision Computing, 101*, 103979. https://doi.org/10.1016/j.imavis.2020.103979
- Ramli, D. Y., Hariani, S., Hamzah, A. P., & Usman, F. (2020). The implication of features and trust that influence the intention to use the digital payment application. South East Asia Journal of Contemporary Business, Economics and Law, 22(1), 105-113.
- Ray, A., Dhir, A., Bala, P. K., & Kaur, P. (2019, June 25). Why do people use food delivery apps (FDA)? A uses and gratification theory perspective. *Journal of Retailing and Consumer Services*, 51, 221-230. doi:10.1016/j.jretconser.2019.05.025
- Reichheld, F.F. and Schefter, P. (2000). *E-Loyalty: Your secret weapon on the web.*Retrieved May 29, 2022, from https://hbr.org/2000/07/e-loyalty-your-secret-weapon-on-the-web
- Richard, R. (1993). A framework linking intangible resources and capabilities to sustainable competitive advantage. *Strategic Management Journal*, *14*, 607-618.
- Shaizatulaqma, K. A., Fakhrul, R., Ali, M. M., & Zhang, Q. (2021). Understanding the consumer's intention to use the e-wallet services. *Spanish Journal of Marketing ESIC*, 2(3), 446-461. doi:10.1108/SJME-07-2021-0138
- Sullivan, Y. W., & Kim, D. J. (2017, December 28). Assessing the effects of consumers' product evaluations and trust on repurchase intention in ecommerce environments. *International Journal of Information Management*, 39, 199-219. doi:10.1016/j.ijinfomgt.2017.12.008
- Sun, S., Folarin, A. A., Ranjan, Y., Rashid, Z., Conde, P., Stewart, C., ... RADAR-CNS Consortium. (2020). Using smartphones and wearable devices to monitor behavioral changes during COVID-19. *Journal of Medical Internet Research*, 22(9), e19992. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7527031/
- SurveyMonkey. (2022). *Using feature importance research to drive product success*. Retrieved May 29, 2022, from https://www.surveymonkey.com/market-research/resources/feature-importance-research-product-success/
- Prasad, C. V., & Pasupathi, D. G. (2019). User's perception towards e-wallets: A study with special reference to pattambi muncipality. *A Journal Of Composition Theory*, 12(11), 327-336.

- Wong, W. H., & Mo, W. Y. (2019). A study of consumer intention of mobile payment in Hong Kong, Based on Perceived Risk, Perceived Trust, Perceived Security and Technological Acceptance Model. *Journal of Advanced Management Science*, 7(2), 33-38.
- Wong, A. (2022a). E-Tunai Rakyat: How-to redeem your RM30 eWallet credit. Retrieved May 20, 2022, from https://soyacincau.com/2019/12/20/how-to-redeem-e-tunai-rakyat-rm30-ewallet/
- Wong, A. (2022b). TNG eWallet users can soon transfer funds to banks and other eWallets. Retrieved May 20, 2022, from https://soyacincau.com/2020/02/11/touch-n-go-ewallet-duitnow-qr-code-unified-standard/
- Wordvice, H. J. (2022, April 6). *How to present the limitations of the study*. Retrieved June 16, 2022, from https://blog.wordvice.com/how-to-present-study-limitations-and-alternatives/
- Yale, L., & Venkatesh, A. (1986). Toward the construct of convenience in consumer research. *Advances in Consumer Research*, *13*, 403-408.
- Yang, J., & Mossholder, K. W. (2009). Examining the effects of trust in leaders: A bases-and-foci approach. *The Leadership Quarterly*, 21(1), 50-63. doi:10.1016/j.leagua.2009.10.004
- Yo, P. W., Kee, D. M. H., Yu, J. W., Hu, M. K., Jong, Y. C., Ahmed, Z., . . . Nair, R. K. (2021). The influencing factors of customer satisfaction: A case study of Shopee in Malaysia. *Estudios de Economia Aplicada*, 39(12), 1–16. doi:10.25115/eea.v39i12.6839
- Zhou, T. (2012,). An empirical examination of continuance intention of mobile payment services. *Decision Support Systems*, *54*(2), 1085-1091. doi:10.1016/j.dss.2012.10.034