




Generation Z's Behavioural Intention to Use E-Wallet During the Pandemic of COVID-19

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Abstract. An e-wallet is a type of payment system that transfers physical wallet functions to a virtual setting to carry out electronic transactions using a range of payment options, including bank accounts, debit cards, credit cards, loyalty cards, and mobile phones. This study aims to examine Generation Z's behavioural intention to use e-wallets during the pandemic of COVID-19. An online survey was conducted through Google Forms with the respondents from all faculties of UiTM Negeri Sembilan branch, Seremban Campus. The descriptive finding ($n = 344$) indicates a high level of behavioural intention to use e-wallets among Generation Z. There were 209 respondents, which are more than half, who are strongly aware of the growth of technology. The frequent types of e-wallet used among the respondents are ShopeePay which is about 36.71%. According to the study's findings of behavioural intention to use e-wallets among Generation Z during the COVID-19 pandemic, it can be concluded that this generation had a high intent to utilise e-wallets.

Keywords: E-wallet · Pandemic COVID-19 · Behavioural intention · Generation Z

1 Introduction

Coronavirus disease, commonly known as COVID-19, is a pathogenic virus first discovered in Wuhan City, Hubei Province, China, in early December 2019 [1]. Since the coronavirus epidemic has been discovered worldwide, virologists, epidemiologists, and public health specialists have been concerned that the virus may become endemic in humans. Moreover, the recently discovered Omicron variant of SARS-CoV-2 has been exponentially rising in multiple countries, in which the increasing infections were most likely due to the combination of two factors which are enhanced transmissibility and the variant's capacity to circumvent immunity acquired by the previous infection [2]. Physical money could be the medium for the spread of the COVID-19 virus when it is handled by an infected person [3]. As a consequence, the World Health Organization has been pushing individuals to implement as many digital payment alternatives as possible due to the aftermath of the COVID-19 outbreak [4].

The fast advancement of information technology has resulted in several innovations across a wide range of fields, such as business and finance, where the innovations can be seen in the payment system [5]. In keeping with the worldwide trend of financial technology advancement in e-payments toward a cashless society, Bank Negara Malaysia (BNM) has introduced the Financial Sector Blueprint (FSBP) 2011–2020 as the driving force behind the e-payment agenda to achieve a cashless society in Malaysia by 2020 [6]. In 2016, Malayan Banking Bhd (Maybank) was the first to introduce a mobile wallet payment service in Malaysia, allowing users to make cashless payments. This can be done by using their smartphones and other portable devices to scan at merchant card terminals, conveying the Visa PayWave capability nationwide [7].

An e-wallet is a payment system that converts physical wallet characteristics into a digital environment by allowing users to conduct electronic transactions utilising a variety of payment methods such as debit cards, credit cards, loyalty cards, and bank accounts [8]. Following the implementation of the Interoperable Credit Transfer Framework (ICTF) on a national holiday on 20th March 2018, e-wallets had become a phenomenon in digital and electronic commerce in Malaysia within which ICTF was one among the initiatives of BNM to embrace the employment of e-wallets in Malaysia through a unified network. It was done by providing an infrastructure for shared payment between bank e-wallets and non-bank e-wallets [9]. According to [6], the launch of several e-wallet applications by merchants after the implementation of ICTF caused e-wallet developing rivalry to become more vigorous. Digital transactions via an e-wallet could simplify the financial transaction process and provide benefits to the cashless economy, such as convenience, ease, and a record of expenditure [10]. Furthermore, the e-wallet has become increasingly popular among sellers due to its effectiveness in cash management, rapid transaction method, and cheaper labour cost [11].

Figure 1 shows the line chart of the top five brands of e-wallets in 2021. The figure shows that the top 5 brands of e-wallets preferred by Malaysians include Touch’n Go,

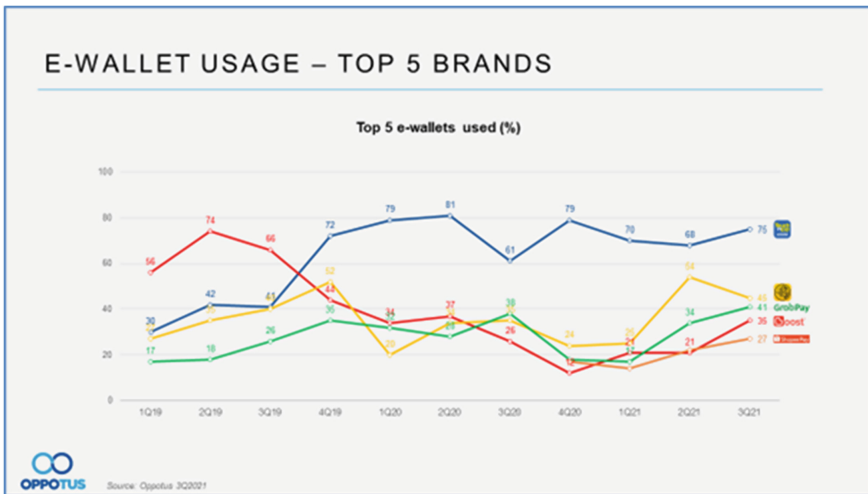


Fig. 1. Top 5 Brands of E-Wallet in 2021 Source: The Oppotus Team [12]

Maybank QR Pay, GrabPay, Boost, and ShopeePay. Touch'n Go maintained its dominance in the e-wallet category, and it was unsurprising given that the company's objective is to create a cashless society. Meanwhile, ShopeePay consistently improves its adoption rates as a relatively new competitor in the market and sector even though it has relatively the lowest usage compared to the other top e-wallet brands. This is most likely due to the large number of customers using the Shopee application who started to use ShopeePay instead of other payment methods available in the application. Based on Fig. 1, the usage of e-wallets in Malaysia is acceptable. However, a few measures must be taken to encourage society to implement e-wallets in their daily lives.

Behavioural intention is viewed through the extent of customer willingness to use the present system continually, assuming the consumer has continued access to knowledge [13]. In this study, the behavioural intention was referred to as the students' behavioural intention to use e-wallet payment during the COVID-19 pandemic. Government encouragement for e-wallet innovation may have influenced people's intentions to use e-wallets during this pandemic outbreak. For instance, the government has introduced some measures, including the ePENJANA e-wallet stimulus, the Shop Malaysia Online initiative, and the Micro, Small, and Medium Enterprises (MSME) e-commerce Campaign to boost domestic spending for local merchants and increase the acceptance of digital payments as a safer mode of payment than cash during the COVID-19 pandemic [14]. To clarify, even though the government has encouraged citizens to use cashless payment methods, some of them would prefer to continue using traditional payment methods.

To determine the behavioural intentions to use e-wallets, this study has focused on Generation Z, who was born in the year of 1995 until 2012 and is renowned as "Digital Natives" [15]. The students of UiTM Negeri Sembilan branch Seremban campus are categorised as Generation Z as most of them were born between the years 1999 and 2002. Due to that, they were chosen as the sample of this study.

1.1 Research Objective

To examine Generation Z's behavioural intention to use e-wallets during the pandemic of COVID-19.

1.2 Significance of Study

The finding of the study could benefit many parties during the pandemic. Firstly, higher education institutions can examine the intention of Generation Z in using the e-wallets such as forming a partnership with the best e-wallet operator in Malaysia to promote e-wallets. As a result, it will encourage more students in higher education institutions to start practising the cashless method.

1.3 Research Design

According to [16], descriptive statistics describe the interaction between variables in a sample or population to analyse the data in an ordered way. The researchers also described the descriptive analysis as a precondition for inferential statistics and serve as its basis. A measure of the frequency and a measure of central tendency are the types of descriptive analyses used in this study.

2 Method of Analysis

The study by [17] states that descriptive analysis is used to describe the environment or situation. In this study, the data of the students' behavioural intention to use e-wallets were analysed using IBM SPSS. The descriptive analysis used frequency and percentage to examine the level of students' behavioural intention to use e-wallets during the pandemic of COVID-19. The percentages and frequency values are most suited for utilisation to provide researchers with more detailed and precise information as required by the objective of the study.

3 Results

365 samples have been collected by using Google Forms. However, only 318 samples were used in this study. This is due to the process of data cleaning where 47 samples needed to be removed due to duplicate cases. Next, the descriptive analysis was performed by using the cleaned data. The descriptive analysis used in this study involved the value of frequency, mean and percentage.

A detailed overview of the demographic profiles of the respondents is shown in Table 1, which consists of three items such as gender, faculty, and education level. Based on the sample acquired through the distribution of questionnaires, female respondents considerably surpassed the male respondents at 72.3% compared to 27.7%, respectively. The overwhelming number of responses are from the Faculty of Administrative Science & Policy Studies (FSPPP), which leads at 43.4% followed by the Faculty of Computer and Mathematical Sciences (FSKM) with 37.4% and the least, which is the Faculty of Sports Science & Recreation (FSR) at 19.2%. Most of the respondents have a degree as their education level (81.1%) and the rest are diploma students (18.9%).

Next, Table 2 shows the calculated data on the general information regarding the use of e-wallets. A detailed overview of this section used the frequency and percentage of each item to examine the level of respondents' behavioural intention to use e-wallets during the pandemic of COVID-19. Based on the awareness of the growth of technology, it can be said that 65.7% or 209 of the respondents, which is more than half, are strongly

Table 1. Demographic Profiles of the Respondents

		Frequency	Percentage (%)
Gender	Female	230	72.3
	Male	88	27.7
Faculty	FSPPP	138	43.4
	FSKM	119	37.4
	FSR	61	19.2
Education Level	Diploma	60	18.9
	Degree	258	81.1

Table 2. General Information on The Use of E-Wallet

		Frequency	Percentage (%)
Awareness of The Growth of Technology	Not Aware	4	1.3
	Slightly Aware	105	33.0
	Strongly Aware	209	65.7
Usage of E-Wallet	Non-users	39	12.3
	Users	279	87.7
Experience in Using E-Wallet	Never	19	6.0
	Less than 6 Months	88	27.7
	6 Months to Less than 1 Year	61	19.2
	More than 1 Year	150	47.2
Frequency Used for E-Wallet per Week	None	54	17.0
	1-4 Times	196	61.6
	5-8 Times	40	12.6
	9-12 Times	10	3.1
	Over 12 Times	18	5.7

aware of the growth of technology. In the meantime, just four of the surveyed individuals claim to be unaware of the rapid technological growth. Hence, it can be said that most members of Generation Z in UiTM Seremban are aware of technological advancements.

It can be concluded that the majority of students utilise e-wallets, as 87.7% of the frequency data was obtained. The remaining 12.3% refer to those not using the e-wallets application. Furthermore, 150 of the respondents who reported the highest value among all respondents had been using the e-wallet for more than a year. Experience in using e-wallets of less than six months was recorded at 27.7% followed by 19.2%, which refers to between six and less than a year of using the e-wallet. The lowest value, which is 6%, indicates that only twenty students are not using e-wallets.

For the item that refers to "Frequency Used for E-Wallet per Week", it was found that roughly 61.6% of the respondents are frequently accessing the e-wallets applications where the amount of time that they spend using e-wallets is from one to four times a week. Besides, there are 54 respondents which equate to 17% of people who do not use their e-wallets at least once per week. In addition, 12.6% indicate that just 40 respondents use e-wallets five to eight times per week, followed by 5.7% who use e-wallets more than twelve times per week. Lastly, the frequent use of e-wallets between nine and twelve times per week was found to be the least number of respondents, equal to only 3.1%.

However, it can be concluded that the data collected is not consistent. This can be seen when the data shows that 19 respondents stated that they do not have experience in using e-wallets despite there being 39 respondents that choose they are non-users.

Table 3 shows the types of e-wallets used by the respondents. There are nine types of e-wallets that the respondents decided to use. It was found that ShopeePay was given the

Table 3. Types of E-Wallets Used by The Respondents

Types of E-wallets Used by The Respondents	Frequency	Percentage (%)
ShopeePay	261	36.71
TouchnGO	231	32.49
GrabPay	104	14.63
Boost	56	7.88
BigPay	47	6.61
MAE	7	0.98
DuitNow	3	0.42
ApplePay	1	0.14
PayPal	1	0.14

highest score (Frequency = 261, Percentage = 36.71%) to be the main type of e-wallet that the respondents often use. Next, 32.49% of those who responded to the survey are likely to utilise the TouchnGo e-wallet, followed by GrabPay, with 104 respondents using that e-wallet. The following e-wallets are Boost and BigPay, which have frequencies of 56 and 47, respectively. Besides, MAE and DuitNow are two e-wallets that can be deemed unfavourable because it was found that only 0.98% and 0.42% use them, respectively. Finally, PayPal and ApplePay are considered to be the least popular types of e-wallets because each was discovered to have only one user among the respondents, which is equal to 0.14%.

Table 4 displays the total score and mean score of each item of the behavioural intention to use an e-wallet from the responses. From the analysis, it was found that approximately, 72.30% of the respondent intended to use an e-wallet during the pandemic of COVID-19 (total score = 1263, mean value = 3.97, Agree = 39.9%, Strongly Agree = 32.4%).

Next, 69.8% of the respondents prefer to use the e-wallet for payment transactions during the pandemic of COVID-19 (total score = 1247, mean value = 3.92, Agree = 38.7%, Strongly Agree = 31.1%). Lastly, 75.5% of the respondents have the intention to use the e-wallet for payment transactions in future (total score = 1283, mean value

Table 4. Behavioural Intention to Use E-Wallets

Code	Measurement Item	Total Score	Mean Value
BI1	I will use an e-wallet for payment transactions during the pandemic of COVID-19 pandemic.	1263	3.97
BI2	I prefer to use an e-wallet for payment transactions during the pandemic of COVID-19	1247	3.92
BI3	I will use the e-wallet for payment transactions in the future	1283	4.03

= 4.03, Agree = 41.5%, Strongly Agree = 34%). Overall, the respondents of this study have a good behavioural intention to use e-wallets during the pandemic of COVID-19.

4 Discussion and Conclusion

From our study, it is found that 65.7% of the respondents (209 respondents) are strongly aware of the growth of technology. The frequent types of e-wallet used among the respondents are ShopeePay which is about 36.71%. Lastly, this study found that the respondents had a high intention to utilise e-wallets during the COVID-19 pandemic.

The objective of this study is to examine Generation Z's behavioural intention to use e-wallets during the pandemic of COVID-19. From the analysis, it can be concluded that Generation Z has a high level of intention to use e-wallets during the COVID-19 pandemic. This finding is consistent with the finding from [12] where there is a moderate to a high level of intention to use e-wallets during the COVID-19 pandemic among consumers in Kuala Lumpur. According to [18], there has been a tremendous rise in the adoption of e-wallets during the intra-period of the COVID-19 pandemic and Movement Control Orders (MCO). This is proven by the registrations of 700,000 users in a minute in response to the "Penjana Economic Recovery Plan" which is one of the initiatives from the government to boost the use of e-wallets.

This situation occurred because it is more hygienic as people can make contactless payments and minimise physical contact. Therefore, it is relevant if more people intend to utilise e-wallets during the COVID-19 pandemic. According to the study's findings of behavioural intention to use e-wallets among Generation Z during the COVID-19 pandemic, it can be concluded that this generation had a high intent to utilise e-wallets.

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