The Impact and Effectiveness of E – Wallet Usage for Malaysian Male and Female

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Abstract:

In the modern society with booming technologies worldwide, the business process and transactions are no longer constrained to counting banknotes. The payment processes have been transformed to cashless payment from the traditional way of using cash. E-wallet is a financial technology (Fintech) that enable customers to make payment for their purchases and provide merchants a network to receive payment. However, there are problems such as security issues that could be the hindrance of effectiveness of E-wallet usage in Malaysia. Hence, the main objective of this research is to study the effectiveness of E-wallet usage for Malaysian. This study adopts a quantitative approach to collect data with non-probability sampling. The findings of this study indicated respondents often use E-wallet, and they would recommend using E-wallet. In addition, the findings revealed that there are no significant differences in the gender and income levels on the effectiveness of E-wallet usage. However, there is a significant difference between age groups and the effectiveness of E-wallet usage.

Keywords- Malaysia, E-Wallet, Effectiveness, Gender, Payment

1. Introduction

In the modern society with booming technologies worldwide, the business process and transactions are no longer constrained to counting banknotes. Technology developments that have been applied in business such as digital payments have obviously result in huge changes in our daily life. Over the time, the payment processes have been transformed to cashless payment from the traditional way of using cash. The term "cashless society" refer to the trend that businesses are conducted through electronic process [1]. For example, cashless payment includes E-wallets, credit cards and debit cards, and internet banking. E-wallet is a financial technology (Fintech) that enable customers to make payment for their purchases and provide merchants a network to receive payment [2]. E-wallets are available in the form of mobile application which the users need to install it on their smart phone or smart devices, register an account and verify their identification [3]. Users will need to link the E-wallet with their bank account or credit and debit cards after they have registered. There are variety of E-wallet service providers in Malaysia, namely Grab, Touch & Go, Boost and so on. The technology of E-wallets allows users not only to make payment, but also to send and receive fund, and pay bills through the E-wallet application. Since Covid-19 pandemic, the acceptance of E-wallet has been observed in a higher volume of installation and usage [4]. This is due to contactless payment are considered

as a safer payment method instead of cash as it is necessary for people to practice social distancing to reduce the spreading of Covid-19 infection [4].

Research Problem

The rapid growing of E-wallets has been evolved globally. However, there is still a long journey and enormous challenge to the high level of E-wallet utilisation in Malaysia [5]. As at today, there are more than 10 E-wallets are currently offered in Malaysia. Consumers may find that it is frustrated when there are too many choices of E-wallets in the market [5]. Therefore, consumers will need to determine which E-wallet is the best to be used, subject to the considerations such as safety and security, cash back, and loyalty points. Eventually, consumers may perhaps prefer existing payment methods like credit or debit cards as they are used to it. Notwithstanding the benefits and ease to use E-wallets, there are still problems such as fraud or scam and security issues that are in the concern of consumers [6]. E-wallets are a digital payment that fully operate on smart phone. Some consumers being reluctance to use E-wallets as they do not recognise their smart phone as a secure payment method [5]. Besides that, there is the need to link financial information such as bank account details with the E-wallet. Hence, consumers will be liable to any financial losses in the event of unauthorised or fraud transactions. On the issue of unauthorised transactions, consumers will be able to get refund. However, the reconciliation process will be time consuming and cause inconvenience for the consumer. Till now, E-wallets are still not generally utilised in Malaysia [7]. The development of E-wallets and its related concepts and technologies will not be making good use if there is a low effectiveness of E-wallets usage. Hence, this paper is aimed to study the effectiveness of E-wallets usage in Malaysia.

Research Objective

The main objective of this paper is to study the effectiveness of E-wallet usage for Malaysian.
The specific research objectives consist of:
1. To study the effectiveness of E-wallet usage for Malaysian consumers in Malaysia.
2. To determine the level of E-wallet usage among various consumers in Malaysia.
3. To evaluate differences among various consumers in Malaysia on the effectiveness of E-wallet usage.

2. Literature Review

i. Effectiveness of E-wallet usage

The launch of E-wallet is concurrently with the introduction of cashless society where daily activities will be carry out in a more efficient and convenience way [7]. For instance, daily transactions can be performed effortlessly for consumers, and all transactions made are easier to be tracked for businesses. Though the E-wallet technology is still in the emerging stage in Malaysia, this financial technology is the key solution that could drive Malaysia financial environment towards a cashless society [8].

ii. Security concern on E-wallet

Overtime, E-wallet has becoming common and slowly integrating to Malaysian daily life owing to its ease of use in conducting transaction. However, security is still one of the major concerns that affecting the effectiveness of E-wallets usage among Malaysian [8]. Digital payment such as E-wallet are exposed to certain risks which include personal data breaches, fraudulent, hacking, and unauthorised transactions. These issues could be the hindrance of broad usage of E-wallet in Malaysia.

Digital payment is a technology that severely depends on security with a large group and increasing number of users. Previous research examined that security issue is one of the important factors influencing the intention to use E-wallet [9].

iii. Various Users by Demographic

Gender

Gender is one of the important variables in examining the effectiveness of E-wallet usage [3]. Some of the previous studies revealed that males are more likely to use E-wallet as payment method compared with females [6]. This is attributable to males tend to exhibit the encouraging attitude to learn and adopt latest technology [6]. On the other hand, there is a higher level of cautious for females to accept innovative technology [7].

Age

Previous findings determined that younger age group of consumers are more familiar with E-wallet and tend to use E-wallet in their daily life [10]. Contrastingly, the consumers from older age group are more conservative and have certain level of anxiety on technology usage particularly in financial transaction related technology [11]. Thus, it has been concluded that age is an important factor influencing the effectiveness and usage of E-wallet.

Besides that, younger age group of consumers are usually having more experience with latest development of internet, technology, and its practicality [12]. However, older consumers perceive E-wallet as a risk and still prefer face to face in conducting transactions. Additionally, some older consumers assumed that it is difficult and complicated in using digital payment such as internet banking and E-wallet.

Income level

The spending behaviour and attitudes are mostly affected by income level of consumers [13]. There are several studies analysed that income levels have significant relationship with the adoption of technology such as E-wallet [14]. For example, consumers who earned more income will have access to internet connection and latest technology. Whilst lower income consumers may face difficulties in purchasing smart phone or subscribe to internet services.

iv. Hypotheses of the Study

Based on the literature review, the following hypotheses of study are formulated. Figure 1 shows the conceptual framework. They are:

H1: There is a positive relationship between security concern and the effectiveness of E-wallet usage.

H2: There is a difference between male and female users on the effectiveness of E-wallet usage.

H3: There is a difference between user age groups on the effectiveness of E-wallet usage.

H4: There is a difference between income level on the effectiveness of E-wallet usage.

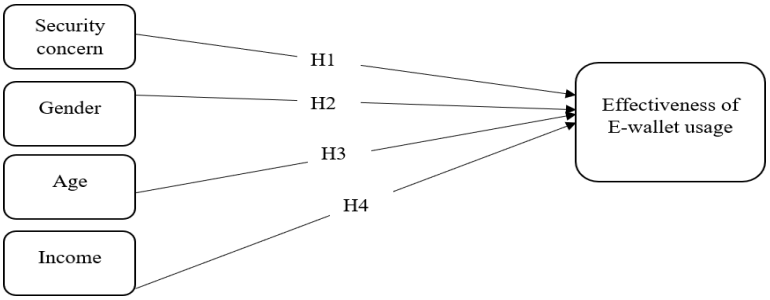

Figure 1: Conceptual Framework

3. Research Methodology

i. Data collection

A survey questionnaire was created via Google Form and distributed using several social media applications, including emails, WhatsApp, and Facebook. Respondents were invited to complete the questionnaire online. Data collection was completed in 3 weeks and there is a total respondent of 105. The questionnaire was designed with a 5-point Likert scale. The point ranging from 1 to 5, (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). The questionnaire requires 5 to 10 minutes to complete, and all participants are voluntarily responding to the survey. The objective of the survey and the usage of the data obtained from this survey are strictly for research purposes only.

ii. Sampling design

The sample population consists of E-wallet users in Malaysia, who are above the age of 18, and have installed and use at least one E-wallet application. This research adopts a quantitative approach to collect data with non-probability sampling.

Data Analysis

SPSS Version 26 will be used in this research to analyse the data collected. Descriptive analysis and correlation analysis will be conducted in this study to test the relationship among variables and to validate the research hypotheses.

4. Result and Conclusion

i. Demographic Analysis

54.7% of the respondents are male while 45.3% of respondents are female. Almost half of respondents are from age group of 18 – 30 (47.2%), 23.6% are from age group 31 – 40, 16% respondents are from age group 41 – 50, 13.2% of respondents are 50 years old above. For the income levels, 23.6% of respondents earned less than RM 2,000, 50% of respondents are earning RM 2,001 to RM 5,000, and 26.4% of respondents earned more than RM 5,000. Its shown in Table 1

Table 1: Demographic analysis of respondents.

Demographic	Category	Frequency	Percentage
Gender	Male Female	58 48	54.7 45.3
	Total	105	100
Age	18 – 30 31 – 40 41 – 50 Above 50	50 25 17 14	47.2 23.6 16 13.2
	Total		100
Income	Below RM 2,000 RM 2,001 – RM 5,000 RM 5,001 and above	25 53 28	23.6 50 26.4
	Total		100

ii. Security concern on E-wallet

One sample t-test was conducted to measure the level of security of concern on E-wallet. The results revealed that 76.2% of respondents feel safe to use E-wallet (Mean=3.75, Std. Deviation=1.163), with t-value = 6.513 (p=.000). Besides that, 75.6% of respondents believe that their transactions are secured when using E-wallet (Mean=3.71, Std. Deviation=1.179), 78.5% of them believe that E-wallet system is trustworthy (Mean=3.87, Std. Deviation=1.122), 81.9% of them agreed that E-wallet is a reliable payment method (Mean=4.08, Std. Deviation=1.002), 77.1% of them believe that their money will be safeguarded by E-wallet service providers (Mean=3.86, Std. Deviation=1.037). Its shown in Table 2.

Table 2: One Sample t-test for security concern on E-wallet.

Statement	Mean	Std. Deviation	%	t	df	ρ
1. I feel safe to use E-wallet.	3.75	1.163	76.2	6.513	104	.000
2. I believe that my transactions are secured when using E-wallet.	3.71	1.179	75.6	6.331	104	.000
3. I believe E-wallet system is trustworthy.	3.87	1.122	78.5	7.830	104	.000
4. E-wallet service is a reliable payment method.	4.08	1.002	81.9	10.902	104	.000
5. I believe E-wallet service providers will secure the money of users.	3.86	1.037	77.1	8.431	104	.000
Mean for security concern on E-wallet	3.854	1.1006	77.86	8.0014	104	.000

iii. Effectiveness of E-wallet usage

One sample t-test was done, and the result demonstrated that 75.7% of respondents often use E-wallet for transactions (Mean=3.72, Std. Deviation=1.164) with t value of 6.370 (p=.000). The respondents intend to use E-wallet more often in the future (85.2%), it is easy for them to use E-wallet in daily life (89.2%), they use E-Wallet for convenient purposes (87.5%), and 80.9% of them would recommend using E-wallet. The overall result exhibited a high level of effectiveness of E-wallet usage with mean of 4.052 and Std. Deviation of 1.0364. Its show in Table 3.

Table 3: One Sample t-test for Effectiveness of E-wallet usage.

Statement	Mean	Std. Deviation	%	t	df	ρ
1. I often use E-wallet for transactions.	3.72	1.164	75.7	6.370	104	.000
2. I intend to use E-wallet more often in the future.	4.05	1.078	85.2	9.962	104	.000
3. It is easy for me to use E-wallet in daily life.	4.24	.915	89.2	13.867	104	.000
4. I use E-Wallet for convenient purposes.	4.25	.978	87.5	13.066	104	.000
5. I would recommend using E-wallet.	4.00	1.047	80.9	9.787	104	.000
Mean for effectiveness of E-wallet usage	4.052	1.0364	83.7	10.6104	104	.000

iv. Independent t-test

The Independent t-test is used to determine the differences between male and female respondents on the effectiveness of E-wallet usage. The results indicated that males have higher effectiveness of E-wallet usage with a mean of 4.33, Std. Deviation = 0.866 as compared with females (Mean=4.13, Std. Deviation=0.969). However, the t value of .932 with insignificant value of .268 indicated that there are no significant differences between gender and effectiveness of E-wallet usage. Thus, H2 is not supported. Its shown in Table 4.

Table 4: Independent t-test for effectiveness of E-wallet usage by gender

Gender	N	Mean	Std. Deviation	t	df	p
Male	58	4.33	0.866	.932	196.272	.268
Female	47	4.13	0.969			

v. One-Way ANOVA

Age

One-Way ANOVA result show that F (3,101), p = .025, indicate that there is a significant difference between age and the effectiveness of E-wallet usage since the p value is .025,

which is less than the significant p level of p<.05. Thus, H3 is supported. Its show in Table 5.

Table 5: One-Way ANOVA for effectiveness of E-wallet usage by age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.637	3	2.546	3.238	.025
Within Groups	79.410	101	.786		
Total	87.048	104			

Income level

The result of One-way ANOVA for effectiveness of E-wallet usage by income revealed that F (2,102), p = .606. Hence, there is no significant differences between income levels and effectiveness of E-wallet usage and H4 is not supported. Its show in Table 6.

Table 6: One-way ANOVA for effectiveness of E-wallet usage by income

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.378	2	.689	.504	.606
Within Groups	139.612	102	1.369		
Total	140.990	104			

vi. Conclusion

Overall, this research consisting of 105 respondents from different gender, age groups and income levels. Most of the respondents asserted that they intend to use E-wallet more often in future, they use E-wallet for convenience, it is easy for them to use E-wallet and they would recommend using E-wallet. On the other hand, on the security concern of E-wallet, the respondents acknowledged that E-wallet is a reliable payment method, their transactions and money are secured, and E-wallet system is trustworthy.

Besides that, the findings of this study revealed that there are no significant differences in the gender and income levels on the effectiveness of E-wallet usage. However, age groups are observed to have a significant impact on the effectiveness of E-wallet usage.

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