

## **E-wallet Usage: A survey among smartphone users in UiTM Puncak Perdana**

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**Abstract.** The study aims to determine the usage of e-wallet among smartphone users in UiTM Puncak Perdana. The potential to make electronic payment transaction to purchasing goods is more convenient for users has increased day by day. Since the pandemic era, this approach has encouraged users to use it more. Moreover, the research findings can help service provider to determine whether users fully utilize e-wallet even after MCO completed. An exploratory study involving surveys with self-administered questionnaires was conducted among 103 of smartphone users in UiTM Puncak Perdana from November 2021 until January 2022. The respondents comprised Students, Academic Staff, Administrative Staff, and others. Descriptive analysis was used to present the findings. The findings shows that Social Influence and Facilitating Condition were fully supported. Recommendations are proposed to expend sample size and conducting more studies in e-wallet.

**Keywords:** E-wallet, user satisfaction, e-wallet usage, smartphone users, information management and library management.

### **1 Introduction**

E-wallet has been defined as a platform that uses mobile devices to enable users to make a payment electronically [1]. Mobile payments are growing and being accepted by the user in various countries [2]. Various mobile wallets or e-wallets have been offered by financial institutions and service providers which follow their own country's regulations and rules. Also, there are many collaborations between service providers and financial institutions. For example, the collaborations between Google Wallet and Mastercard. In addition, using an e-wallet to make a payment and transac-

tions can save time and money. Moreover, it is more convenient and faster than the traditional way of banking system [3]. Users consider this payment method to be beneficial [4]. For instance, users feel that using an e-wallet is very convenient and easy with small-scale transactions. The mobile wallet or e-wallet needs to be installed in mobile devices which allow users to store their money and directly do a transaction from e-wallet [5]. This has given an opportunity to merchants to provide many programs to customers such as loyalty and promotions. As claimed by <https://www.investopedia.com/terms/m/mobile-wallet.asp>, e-wallet is widely known as a system that stores our payment or card information on a mobile device. It can be used in the listed merchants that provide the e-wallet service and is a convenient way to make payment. E-wallet has transformed transactions from the traditional way into the technology way [6]. Before it happens, all transactions and payments are cash and nowadays most of the time are using mobile devices. In Malaysia, the adoption in using e-wallet has grown day by day. It has influenced business to swiftly become digital. Business has transformed the way they operate and payment methods because of the increasing use of mobile devices and smartphones. Moreover, financial institutions compete to develop tools and services that are very convenient at lower cost. With the increasing rise of e-wallet use, the degree of utilization and usage of e-wallet by smartphone users at UiTM Puncak Perdana must be high. As a result, several studies have been undertaken to discover the factors driving users to use e-wallets. According to Girirjia (2019), smartphone users still lack trust and confidence in e-wallet transaction security. Furthermore, smartphone users still feel comfortable using e-wallets since they dislike the internet and the possible security dangers to users' privacy [7]. Although e-wallets provide convenience, comfort, and flexibility via cashless transfers, rebates, and discounts, negative factors such as security concerns, technical gaps such as Internet penetration, and restrictions faced by disadvantaged clients must be addressed. It has something to do with the pace of transactions. When a person uses an e-wallet to accomplish a transaction. Milton Friedman (1953) defined rational choice philosophy as the description of human transaction cost activities toward the benefits of adopting action that optimizes personal advantage. Based on these facts, a detailed examination is required to investigate the amount of utilization of the e-wallet system. The purpose of this study is to determine the degree of customer satisfaction with the e-wallet system and to identify the most pleased regions of operation. Based on discussion above, the following research questions are set with direction as per below:

1. What is the level of ease of use, security, trust, social influence, usefulness, facilitating condition on e-wallet usage?

The research study objectives are clearly identified as per below:

2. To identify the level of ease of use, security, trust, social influence, usefulness, facilitating condition on e-wallet usage.

## **2 Methodology**

In this study, exploratory research is designed to design structured questionnaires to study usage when using e-wallets, and further understand consumers' intentions and behaviors. With reference to its effectiveness in solving research problems and achieving research goals, investigative research methods will be implemented in this research. Methodology refers to methods other than the data collection method you wish to use. The researchers used survey research methods in this study, which made it easier to gather information from many population-based respondents. Feedback from a small number of subjects selected from this population will be composed of smartphone users from UiTM Puncak Perdana that are engaged in e-wallet transactions. Because the type of sampling technique used in this study is used in this consideration, the purpose of application is deliberate sampling. In this study, non-probability sampling was selected (Cooper et al. 2003; Sekaran 1992). This focuses on all kinds of people who can meet the information needs. Therefore, when distributed, users will answer a questionnaire about the usage e-wallet. This research also uses quantitative methods because this survey uses questionnaire research to gain data on the usage of e-wallet. Based on the Social Science Statistical Package (SPSS) containing 100 samples, this method specifies the sample size.

## **3 Results**

The results of the study of this research are presented in this section. The statistical approach is used to do the analysis. Each analysis will understand and respond to the study topic. The results collected from the study questionnaire are also described in this chapter. This research covers the usage of e-wallet at the UiTM Puncak Perdana Campus in Selangor. Respondents were academics as well as non-academic personnel involved in the UiTM Puncak Perdana Campus. Firstly, the measuring model's validity and reliability are measured. After analysis of the quality of the measuring model, the structural model was confirmed. In the discussion section, each research issue is explored. However, the Statistical Package for the Social Sciences (SPSS) is also used to calculate the frequency and percentage. To conduct this study, the research disseminated an e-wallet usage questionnaire to respondents using the Google form and utilizing a variety of categories remotely. The number of participants in this study was 103 who utilized the e-wallet usage during the epidemic. To assess usage with an e-wallet at UiTM Puncak Perdana Campus, Selangor, all respondents must honestly answer the questionnaire.

### 3.1 Mean

Table 1: Mean

Variables	Mean
Ease of use	4.63
Security	3.98
Trust	4.13
Social Influence	3.47
Usefulness	4.33
Facilitating Condition	4.16

### 3.2 Descriptive Analysis

The Skewness and Kurtosis value, as well as the Cronbach Alpha test, are used to examine the normalcy and reliability of the data received from the questionnaire. The range of Skewness and Kurtosis of +/- indicates that the data is regularly distributed. In the meanwhile, a Cronbach Alpha reliability score of more than 0.60 is seen as sufficient for assessing factor dependability. The descriptive statistics of e-wallet use are shown in Table 2, with the independent factors of ease of use, security, trust, social influence, usefulness and facilitating condition highlighted. Descriptive analysis aims to give insight and knowledge into the sample's and measured variables' characteristics.

Table 2: Descriptive Analysis

Variables	Indicator	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
Usage	US1	3.971	4	1	5	0.95	-0.206	-0.631
	US2	4.194	4	2	5	0.764	-0.721	-0.481
	US3	4.204	4	2	5	0.852	-0.211	-0.791
	US4	3.816	4	1	5	1.138	-0.352	-0.711
Ease of use	EU1	4.291	4	2	5	0.732	-0.313	-0.673
	EU2	4.35	4	3	5	0.707	-0.8	-0.623
	EU3	4.32	4	2	5	0.753	0.248	-0.889
	EU4	4.33	4	3	5	0.729	-0.906	-0.608
	EU5	4.515	5	3	5	0.636	-0.116	-0.972
Security	SC1	4	4	2	5	0.788	-1.083	-0.121
	SC2	3.99	4	2	5	0.818	-0.452	-0.413
	SC3	4.01	4	1	5	0.83	0.262	-0.535
	SC4	3.796	4	1	5	0.896	0.232	-0.404
	SC5	4.107	4	3	5	0.762	-1.264	-0.185
Trust	TS1	4.146	4	2	5	0.73	-0.539	-0.387
	TS2	4.136	4	2	5	0.776	-0.884	-0.37
	TS3	4.175	4	2	5	0.756	-0.19	-0.58
	TS4	4.097	4	2	5	0.77	-0.053	-0.559
	TS5	4.087	4	2	5	0.777	-0.155	-0.533
Social Influence	SI1	3.825	4	1	5	1.037	-0.008	-0.7
	SI2	3.728	4	1	5	0.957	-0.404	-0.438
	SI3	3.942	4	2	5	1.003	-0.862	-0.526
	SI4	3.864	4	1	5	0.986	-0.559	-0.462
	SI5	3.398	3	1	5	1.135	-0.51	-0.269

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Usefulness	UF1	4.33	4	3	5	0.729	-0.906	-0.608
	UF2	4.32	4	2	5	0.727	-0.199	-0.736
	UF3	4.34	4	2	5	0.758	0.279	-0.936
	UF4	4.369	5	1	5	0.724	-0.024	-0.855
	UF5	4.311	5	2	5	0.859	1.284	-1.211
Facilitating Condition	FC1	4.485	5	2	5	0.652	1.071	-1.121
	FC2	4.165	4	2	5	0.789	-0.926	-0.126
	FC3	4.35	4	2	5	0.72	-0.064	-0.802
	FC4	3.913	4	1	5	0.996	-0.529	-0.54
	FC5	3.864	4	1	5	0.956	-0.414	-0.467

### 3.3 Composite Reliability

When the composite reliability (CR) of each construct surpasses the threshold value of 0.7, a measurement model has sufficient internal consistency dependability. Because of the findings, the items used to represent the 34 constructs have an acceptable internal consistency reliability. Cronbach Alpha was used to assess internal consistency of all scale components (CA). Construction materials with high CA values have the same range and importance (Cronbach, 1971). The usage of CA provides a dependability estimate based on signals from such a connection. However, composite reliability (CR) was used to examine the intrinsic constant dependability of the PLS [8]. While both CA and CR evaluate the same thing (internal consistency), CR considers the indicator's shifting load. CA severely underestimates internal consistency reliability, which it never considers comparable across measures and believes is equally weighted across all indicators [9]. Regardless of whether the dependability coefficient is used, the internal consistency reliability is inadequate when the value is at least 0.7 at an early stage. At a higher level of study, the figures above are more than 0.8 or 0.9. Values smaller than 0.6, on the other hand, indicate a lack of dependability. [10].

Table 3: Composite Reliability

Variables	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Ease of use	0.9	0.902	0.926	0.716
Security	0.851	0.861	0.893	0.626
Trust	0.918	0.924	0.939	0.754
Social Influence	0.877	0.883	0.91	0.671
Usefulness	0.929	0.935	0.947	0.78
Facilitating Condition	0.939	0.946	0.953	0.804

### 3.4 ANOVA

ANOVA is a statistical test used to determine the significance of survey or experiment data. As a result, you can determine whether the null hypothesis should be rejected or if the alternative hypothesis should be accepted [15]. To see the F- and p-values, as well as the boxplots for each of the three groups, you may use the ANOVA table that is generated. Table 4 show the final outcomes of our computations in this instance. Given that this problem's p-value is less than the specified significance

threshold of 0.05, the null hypothesis is accepted. Therefore, the research framework is significant with p-value  $0.01 < 0.05$

Table 4: ANOVA

Modal	Sum of Square	Df	Mean Square	F	Sig.
Regression	46.742	6	7.794	29.247	0.01
Residual	25.582	96	0.266		
Total	72.343	102	0		

### 3.5 Coefficient of Determination (R2)

The R2 number reveals how much of the variation is explained by independent variables. As a result, a higher R2 value improves the structural model's predictive power. R-Squared (R2) is a measurable statistic in a linear regression that calculates the variability of a dependent variable that may be expressed by an independent variable. R-Squared, in other words, reveals how many data points are associated with the regression model. R-Squared may have any value between 0 and 1. The most typical meaning of R-Square is how the regression model fits the observed data; hence, 60% R-Squared shows that the regression matches 60% of the data. A greater R-Squared value, in general, indicates a better model fit.

Table 5: Coefficient of Determination (R2)

	R Square	R Square Adjusted
Usage	0.668	0.647

Table 6: Coefficient

Modal	B	Std. Error	Standardized Coefficients Beta	T	Sig.
Constant	-0.557	0.338		-1.435	0.155
ALL_EU	0.174	0.158	0.124	1.099	0.275
ALL_SC	-0.114	0.135	-0.096	-0.843	0.401
ALL_TS	0.300	0.178	0.241	1.686	0.095
ALL_SI	0.226	0.097	0.226	2.328	0.022
ALL_UF	0.21	0.136	0.171	1.551	0.124
ALL_FC	0.313	0.134	0.243	2.337	0.022

The results show that only facilitating conditions and social influence were supported with a p-value 0.05. Other variables were not supported in this study.

## **4 Discussion**

Security issues have an influence on e-wallet use, which is critical for companies to guarantee that consumer data is safeguarded. Data security is also linked to the effects and decisions made while using an e-wallet. Consider the security issues associated with the e-wallet, since safety concerns are a significant impediment to the installation of e-wallet applications in many engaged companies. The complexity and relevance of e-wallet security challenges may be proven by the fact that e-wallet applications allow various breaches in both retrospect and real time, since user anonymity is not always guaranteed. Trust, on the other hand, is a complicated construct that may be difficult to study and map to people's intents to use technology's capabilities. What makes the concept even more difficult to study is that people's trust perceptions toward technology varies and collecting all these variances may be nearly impossible. Scholars have sought to investigate the effects of trust on technological uptake. Although studies have shown that trust is critical in technology adoption, which supports our results, we believe that additional research is required to identify how the construct might be actualized and mimicked by developers to create better systems and deliver valuable service [8]. When adopting a new technology, the social impact of family, friends, and references plays a significant role, since uncertainty may be reduced by soliciting the views of other users. This impact may be characterized in mobile payment systems as the way an individual's social surrounding views them [10]. This term was described in its traditional version by (Fishbein et al., 1975) as "the person's belief that most people who are significant to him believe he should or should not execute the in-issue behavior." This premise was supported by empirical data discovered in the literature on a variety of new technology systems and service contexts [11]. Furthermore, the usefulness of features demonstrates that online transactions would provide the consumer with a variety of benefits, according to Vijayasarathy (2004). It has feature usability, 72 saves time, and makes comparisons easier. Furthermore, according to Vijayasarathy (2004), the usability of features has a substantial effect on online purchasing intentions. If customers believe that these services are beneficial, they will make an online purchase utilizing an e-wallet as the primary service. The current study had several limitations. The result of this survey may be subject to respondents' attitudes and the degree to which they responded accurately to the questionnaire. Also, the result of the study may not be applied to all smartphone users in UiTM Puncak Perdana.

## **5 Conclusion and Recommendation**

The findings of this investigation will provide a comprehensive conclusion to the research. In this study, all research concerns and research goals were satisfactorily addressed. This study investigates the use of e-wallets at UiTM Puncak Perdana in Selangor. The usage of an e-wallet is a tool that improves the transaction and purchasing power. Users of the e-wallet may be academic personnel, non-academic employees, or other parties associated with UiTM Puncak Perdana, Selangor, if they utilize

the services offered. Researchers discovered that there are various essential elements to consider when evaluating the amount of e-wallet use at UiTM Puncak Perdana in Selangor. This research focuses on the variables that will contribute to e-wallet adoption, such as ease of use, security, trust, social influence, usefulness and facilitating conditions. Even though social influence and facilitating condition efficacy were important variables in e-wallet use, there are other elements that need to be considered and addressed to increase e-wallet usage. In the setting of conducive conditions, relationships between consumers and enterprises may increase over time. Furthermore, if custodians can get confidence information from the services, they will be confident in the e-wallet application. Positive experience aids in the development of confidence and, as a result, the perception that the site is trustworthy. Furthermore, for social influence, that may enhance their use of the system to maximize utilization and it can strengthen the experience and trust of users to report and speak online.

The same research is carried out, but the sample is expanded among the suitable options for the next examination. Many samples and the best time to prepare more respondents for enhanced study. The next trial will allow more targeted people to learn how to utilize an e-wallet. However, further study on e-wallet use is required, although the scope extends beyond UiTM Puncak Perdana, as an example of e-wallet usage across Klang Valley must be undertaken. This research examines the current state of e-wallet use. The adoption of e-wallets will benefit UiTM Puncak Perdana, and it will also provide excellent services on the e-wallet application for all customers. More study is required to look at the other elements that influence the effect of utilizing the e-wallet at UiTM Puncak Perdana. There have only been a few studies on the e-wallet, but the studies focus on how to use the e-wallet services, and there is some study on how the e-wallet works. The research on e-wallet applications must be developed so that it can help consumers. As a result, the author suggests that future studies be considered to conduct more studies on the effectiveness of e-wallets and to contribute more theoretical perspectives and empirical knowledge on the usage of e-wallet services used by users, which will increase the understanding of how to use the e-wallet application.

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