Adopting Unified Theory Acceptance and Use of Technology (UTAUT) in Predicting Accounting Student Intention to Use E-Wallet

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Abstract. Electronic wallets are a type of financial technology (FinTech) that is snowballing and assisting Malaysia in its transformation to cashless payments. Malaysians will likely shift away from cash and toward mobile payment methods. The goal of this research is to investigate the relationship between each element in the Unified Theory of Acceptance and Use of Technology (UTAUT), namely performance expectations, effort expectations, social influence, and facilitating conditions, with the acceptance of E-wallet use among accounting students at the Universiti Teknologi Mara Kelantan Branch (UiTMCK). A set of questionnaires was distributed to students at the (UiTMCK). Data was gathered from 238 accounting students at the Universiti Teknologi Mara Kelantan Branch (UiTMCK) and analyzed with SPSS Statistics version 27. The study findings support the hypothesised performance expectations, effort expectations, social influence, and facilitating conditions that significantly impact on accounting students' intent to use an E-wallet.
Keywords: FinTech, UTAUT theory, UiTMCK

I. Introduction

Recently, a demand for electronic payment methods has emerged among Malaysians rather than traditional payment methods because of the internet's changing development (Haque et al., 2020). According to "Mastercard Impact Study 2020", smartphone adoption has risen in Southeast Asia, and Malaysia has adopted mobile and digital wallets at a higher rate than any other country in Southeast Asia. During pandemics, more individuals utilise online services such as online news, online video streaming, social networking, and online grocery and food purchasing (Kowang et al., 2020). Data from Statista Research Department (2022) stated that almost 87.61 per cent of citizens in Malaysia used smartphones in 2020 which is increasing every year until 2025.

An electronic wallet is a type of financial technology (FinTech) that is becoming more popular and helping Malaysia move toward cashless payments. There is a good chance that Malaysians can switch from using cash to mobile payment methods in the future (Tenk et al., 2020). Utilizing a mobile wallet has some benefits, such as facilitating various financial activities, receiving rewards or discount coupons, and lowering the risk that comes with carrying cash in your pocket. "Boost", "GrabPay", "Touch n Go E-wallet", "Fave Pay" and others are Malaysian mobile wallets. Touch n Go E-wallet is the most popular E-wallet among Malaysians, followed by Grab Pay, Maybank Pay, Boost, and BigPay. Therefore, youth wishing to use Touch n Go E-wallet to collect their ePenjana, particularly during the COVID-19 pandemic, will appreciate the government's enhancement by giving them an incentive. In July 2020, the government distributed RM35 billion as part of the PENJANA expansionary fiscal program. The ePENJANA program has offered certain advantages, including RM50 in E-wallet credits and RM50 worth of E-wallet vouchers, cashback, and discounts.

Additionally, Bank Negara Malaysia (BNM) released the "Financial Sector Blueprint 2011–2020", which aimed to manage and stimulate Malaysia's domestic financial markets and payment system. The Malaysian government included an RM30 incentive for E-wallet users in the 2020 Budget for Malaysia. It will attract more users to use the E-wallet software and increase Malaysian E-wallet users (Tenk et al., 2020). The eBelia Program, which promotes E-wallets and a cashless society, received RM75 million in the Malaysia Budget 2021.

In general, students will use it because it gives them access to E-wallet, which makes it possible for them to communicate without physical touch and prepares them to protect themselves from infection. We believe it is challenging for students to keep track of their spending while using a mobile wallet. Because of that, they are still not confident in accepting innovation and have no knowledge of utilizing an E-wallet or the Internet. As a result, a significant number of individuals still rely on money (Karim et al., 2020). In line with Eysenbach (2019), they agreed that it is due to their lack of awareness and uncertainty regarding the evolution of the E-wallet. So, students are unwilling to accept the new usage standard by using it. They will not grade and provide a good rating on the development because of their frustrating and bad experience using the E-wallet.

Based on results supported by Subaramaniam et al. (2020), they discovered that the E-wallet is not available in some places. Some shops will accept several E-wallets as different forms of cashless payment.

Today's students worry about system failure, outages, and shutdowns (Subaramaniam et al., 2020). Instead of causing them difficulties, they anticipate the E-wallet will make it easier for them to make the payment or complete other transactions. People must be more tolerant when utilising a digital wallet that requires multiple procedures to transfer data to make a payment. Some E-wallets make it difficult for customers by requiring new users to upgrade their E-wallet application systems to the most recent version to complete their payment. It will therefore irritate and aggravate users.

The general issue is that the volume of payment card fraud is spreading fear and distrust in E-wallet payments (Sleiman et al., 2022). Other than that, Ibidunmoye, (2018) agreed that the adoption rate of E-wallet payments appears to be substantially lower than other mobile device functions. Since Abdullah et al. (2020) claimed that the development of technology is a global trend, the findings of this study will benefit all those involved or belonging to society who are participating in and having a significant influence on the perception of the Malaysian economy and market. Financial innovations adopted nationwide to eliminate cash transactions have improved the cashless society. It enhances their understanding of the effects of the determinants, including performance expectations, effort expectations, social influence, and facilitating conditions

II. Literature Review

Diffusion of innovation theory focuses on aspects unique to innovations that influence users' behavior regarding new technology adoption (Moore & Benbasat, 1991). The theories are about information system management that offers comprehensive insights into how people feel, making them useful in many study circumstances. Additionally, the models' opinions changed, reflecting the many types of variables they included, such as subjective norms, motivating factors, attitudes connected to the performance of technology, social factors, experience, and facilitating situations (Venkatesh et al., 2003). Venkatesh et al. (2003) also set the goal of creating a unified theory of technology acceptance by integrating important factors predicting intention and use to explain technology adoption comprehensively. Therefore, to achieve this goal, the fundamental literature on IS acceptance was examined in order to identify conceptual and contextual parallels and across technology acceptance theories from three different study areas, including social psychology, IS management, and behavioural psychology. The ideas provide various perspective on acceptability and implementation of technology because they come from various perspective fields. The Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TPB), and Social Cognitive Theory all represent a socio-psychological call perspective on individual bahaviour study (SCT). According to TRA and TPB, the influence of a person's attitude towards behaviour, a subjective norm, and their perception of their ability to regulate their behaviour are used to quantify their behaviour (Ajzen, 2011).

After reviewing the aforementioned theories, Venkatesh et al. (2003) discovered the need to create the Unified Theory of Acceptance and Use of Technology (UTAUT). The key issue was that significant technological acceptance models had yet be empirically assessed and compared in the literature, allowing speculation about each theory's predictions. Studies on technology usage behaviour have mainly concentrated on straightforward systems like PCs and ignored more sophisticated technologies (Venkatesh et al., 2003).

In the context of IT acceptance, the researchers discovered that UTAUT has higher explanatory power than other relevant models and theories. According to Al-Mamary et al. (2015), the UTAUT model is the one that is most frequently used in the field of technology acceptance since it concentrates on the technological components required for the successful implementation of information systems and predicts how people will use and accept technology and information systems based on a variety of variables. The UTAUT theoretical model predict users' intentions to use that technology. Then, the expected potential for adopting the technology is determined by the direct of four primary constructs, including performance expectancy, effort expectancy, social influence, and facilitating conditions. (Venkatesh et al., 2003).

By 2020, Malaysia hopes to join the rank of industrialised countries with higher living standards. So, to encourage economic growth, the country is expanding in several key sectors (Lim et al., 2017). However, Malaysia has already entered the fourth industrial revolution (4.0IR). It is well known that industries in artificial intelligence, finance, blockchain technology, mobile technology, robotics, and the digitisation of financial services are growing (Engert et al., 2018). According to research evidence compiled by Johns Hopkins Medicine (2020), avoiding physical contact with each other and maintaining social distance are the two most important preventative measures during the COVID-19 pandemic. Indeed, E-wallets became valuable due to the COVID-19 pandemic, the shutdown, and the movement restriction period in Malaysia, which all helped reduce the risk of infection (RBI Governor, 2020).

III. Research Method

The study examines the factors that influence the intention of accounting students at Universiti Teknologi MARA Kelantan Branch (UiTMCK) to use an E-wallet. This study used a quantitative non-experimental research design with four independent variables: performance expectancy, effort expectancy, social effects, and facilitating conditions. The single dependent variable is the intention of the accounting students to use an E-wallet and the unit of analysis was undergraduate accounting students, which include diploma and degree students at Universiti Teknologi Mara Kelantan Branch (UiTMCK).

Research Model and Hypothesis

In the context of IT acceptance, the researchers discovered that UTAUT has higher explanatory power than other relevant models and theories. According to Al-Mamary et al. (2015), the UTAUT model is the one that is most frequently used in the field of technology acceptance since it concentrates on the technological components required for the successful implementation of information systems and predicts how people will use and accept technology and information systems based on a variety of variables. Numerous studies have shown that UTAUT is a valuable model for describing and predicting users' acceptance of new technologies in various situations (Dwivedi et al., 2019). The UTAUT theoretical model predict users' intentions to use that technology. Then, the expected potential for adopting the technology is determined by direct impact of four primary constructs, including performance expectancy, effort expectancy, social influence, and facilitating conditions (Ventakesh et al,.2003) as shown in Figure 1
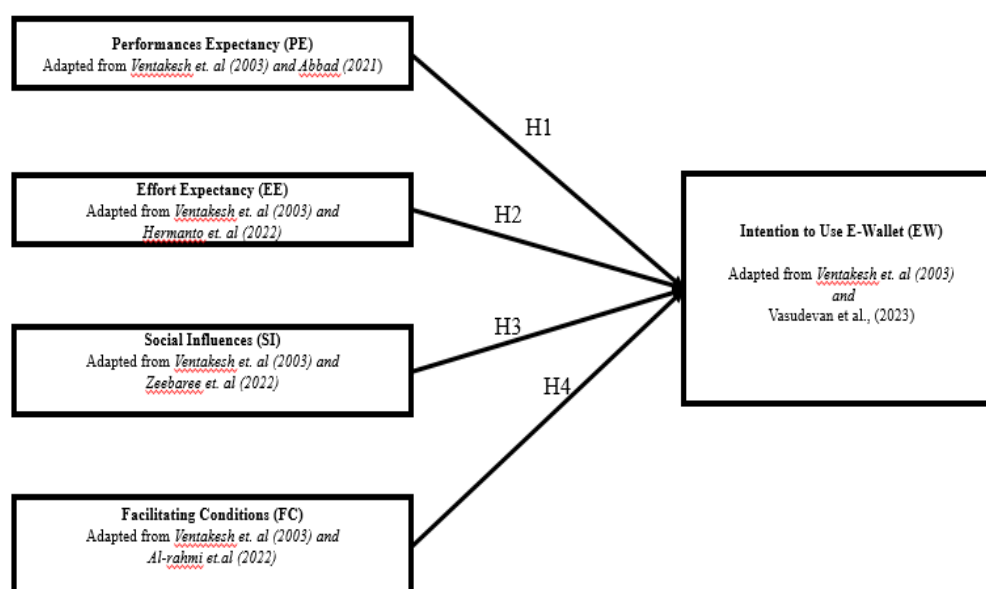

Figure 1. Research Model

The hypothesis is an assumption made in the study and may differ from the actual results after data collection and analysis. They are:

H1: Accounting students' intention to use E-wallets will be influenced positively by performance expectations.

H2: Effort expectancy influences accounting students' intention to use E-wallets.

H3: Social influences will influence accounting students' intention to use E-wallets.

H4: The Facilitating Condition will influence accounting students' intention to use E-wallet

Research Instrument

The research instrument used in this study is a closed-ended questionnaire. The questionnaire comprised three sections, namely Sections A, B, and C. The questionnaire had 24 questions (4 in Section A, 4 in Section B, and 16 in Section C), which were distributed to accounting students at Universiti Teknologi MARA Kelantan Branch (UiTMCK). The Likert scale from 1 (disagree) to 5 (strongly agree) used as a measurement in this study.

IV. Results and Discussions

UiTMCK has 600 accounting students and based on Krejcie and Morgan (1970), the suitable sample size for this research population with at least a 95% confidence level is 234 (the minimum sample number). Data analysis is necessary for any study to ensure that the result is accurate and relevant. (Field, 2005). SPSS Statistics version 27 was used for data analysis. Collected data was analysed using descriptive and inferential statistics. The three techniques in inferential statistics consisting of Factor Analysis, Pearson Correlation, and Multiple Regression Analysis were used in this study.

Descriptive Analysis

Table 1 shows the total number of respondents by level of study.

Table 1. Total of respondents

Level of Study	Number of Students (Population)	Sample
Diploma	144	57
Degree	456	181
Total	600	238

Factor Analysis

This study uses the Principle Component Factor Analysis (PCA) with Varimax-Kaiser Normalisation Rotation Method. Factor Loading for all variables (PE, EE, SI, FC) above 0.3. According to Pallant, (2020), a factor loading of 0.30 indicates that a construct has reached the minimum level. Test index of The Kaiser-Meyer-Olkin =.935 and sig. value < 0.05 as shown in Table 2 indicates that the data were considered appropriate for factor analysis.

Table 2. Summary of factor analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.935	
Bartlett's Test of Sphericity	Significance	.000

Pearson Correlation

Pearson Correlation is used to investigate whether there is any significant correlation between the variables and to explain the direction and strength of the linear relationship between two variables. The results demonstrated the interaction between the four independent factors of performance expectancy, effort expectancy, social influences, facilitating condition, and the dependent variable of intention to use an E-wallet. Because the r-values for the four independent variables ranged from +/-.50 to 1.00 and were .565 for performance expectancy, .502 for effort expectancy, .545 for social influences, and .566 for the final variable of facilitating conditions, Here, there was a significant positive correlation between the four variables. The result of the Pearson Correlation is shown numerically in Table 3.

Table 3. Pearson Correlation

		EW	PE	EE	SI	FC
Intention to use E-wallet (EW)	Pearson Correlation	1				
	Sig. (2-tailed)					
Performance Expectancy (PE)	Pearson Correlation	.649**	1			
	Sig. (2-tailed)					
Effort Expectancy (EE)	Pearson Correlation	.683**	.649**	1		
	Sig. (2-tailed)					
Social Influences (SI)	Pearson Correlation	.633**	.597**	.691**	1	
	Sig. (2-tailed)					
Facilitating Condition (FC)	Pearson Correlation	.661**	.617**	.635**	.605**	1
	Sig. (2- tailed)					

** Correlation is significant at the 0.01 (2-tailed)

N=238

Multiple Regression Analysis (MLR)

In general, the study revealed that all of the variables, which are performance expectations, effort expectations, social influences, and facilitating conditions significantly correlated with accounting students at Universiti Teknologi MARA Kelantan Branch's intention to use E-wallets. The percentage of independent factors that might be used to describe the dependent variable was indicated by adjusted R^2. The modified R^2 value was 0.593, meaning that performance expectations, effort expectations, social factors, and facilitating conditions could each account for 59.3 % of the variation in the intention to use E-wallet.

The outcomes of the multiple regression analysis demonstrated the validity of the study's predicted hypotheses. First, the findings revealed a strong correlation between performance expectations and the intention to use an E-wallet. The coefficient of this variable was 0.217, t = 3.330, and p = 0.001. H1 was supported. Additionally, it was discovered that there was a relationship between effort expectancy and intention to use an E-Wallet, with a coefficient of 0.296, t=3.606, and p=0.001. H2 is also supported and accepted. Additionally, the findings demonstrate that social factors and the intention to use E-wallet have a positive effect with a coefficient of 0.191, t=2.886, and p=0.004. H3 was so supported as well. The last hypothesis, H4, studied the relationship between facilitating conditions and the intention to use an E-wallet. The analysis showed that the variables had significantly and strong relationship with a coefficient of 0.352, t= 4.610, and p= 0.001. Table 4 presents the results of the regression analysis

Table 4. MLR summary result

Variable	Unstandardized Coefficients	Std Error	t-stat	p-value	VIF
Constant	-.264	.252	-1.047	.296	
Performance Expectancy	.217	.065	3.330	.001	2.193
Effort Expectancy	.296	.082	3.606	<.001	2.642
Social Influences	.191	.066	2.886	.004	2.143
Facilitating Condition	.352	.076	4.610	<.001	1.983

R^2 (Adjusted R^2) = .593
F-statistic (p-value) = 84.743 (.000)
Durbin Watson statistic= 1.838
Significance at p<0.05
a) Predictors: (Constant), Performance Expectancy, Effort Expectancy, Social Influences, Facilitating Condition
b) Dependent Variable: Intention to use E-wallet

This study successfully examines the factors that influence the intention of accounting students at Universiti Teknologi MARA Kelantan Branch (UiTMCK) to use an E-wallet. As a results, there are four factors, as shown in Figure 2, which significantly influence the intention of accounting students at UiTMCK to use E-wallet consisting of performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC).
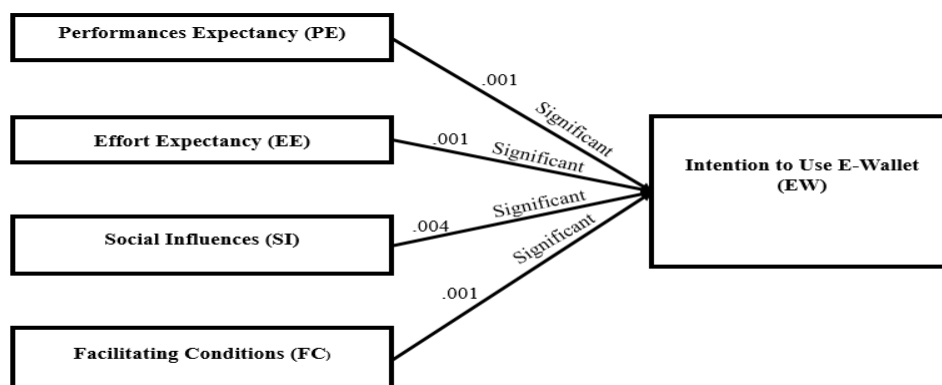

Figure 2. The Research model relationship between acceptance factors and intention to use E-wallet

Table 5. Hypothesis Results

	Hypothesis	Sig. value (p)	Indicator
H1	Performance expectations and accounting students' intention to utilize E-wallets are positively correlated.	.001	Significant
H2	Effort expectations and accounting students' intention to utilize E-wallets are positively correlated.	.001	Significant
H3	Social influences and accounting students' intention to utilize E-wallets are positively correlated.	.004	Significant
H4	Facilitating condition (FC) and accounting students' intention to utilize E-wallets are positively correlated.	.001	Significant

V. Conclusion

Through the following findings, this research makes significant contributions to previous research on E-wallet acceptance. As a result, the study's findings provide helpful recommendations for academic institutions, retailers, and researchers that will help them successfully familiarise themselves with the essential aspects of E-wallet acceptance. Intention to use E-Wallet is not limited to the factors related to system characteristics, cultural aspects, and individual factors, as described in earlier studies, but also includes performance expectations, effort expectations, social influence, and facilitating situations. In response to the government's desire for a cashless society, E-wallets is being expanded to include all payments in every department, shop, college, library, and other places. Therefore, university policymakers must focus on these aspects, which have a significant influence on increasing students' intention to use an E-wallet, which in turn simplifies their payment and buying processes every day.

The outcomes benefit both businesses and universities. E-wallet service providers are researching the factors that must be addressed to increase E-wallet usage. Retailers, in particular, must address performance and effort expectations. By educating students how to use payment system and ensuring that their personal information will be protected, the chance of transferring funds to the wrong wallet, which is caused by a human and technical mistake, can be reduced. Meanwhile, the regulator should encourage retailer involvement in E-wallet services.

In this study, some limits have been pointed out. All accounting students at UiTMCK are the main target population for this study. However, this result would not include UiTMCK students from other faculties. When students from different faculties at UiTMCK are added to this study, it could change how things are going. Students, faculty, universities, states, and levels of study may have different levels of intentions to use E-wallets.

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