

Determinants Influencing The Behavioural Intention In E-Wallet Usage Of University Students In Subang Jaya

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Received: 22.02.2024, Revised: 04.04.2024, Accepted: 15.05.2024

Abstract

This study aims to investigate the current situation of e-wallet usage among university students in Subang Jaya and determine the factors that affect the behavioural intention in e-wallet usage. The main theory applied in the study is the TAM model with an extension of two variables: social influence and perceived security. Convenience sampling, a form of non-probability sampling, was applied to this study. A total of 150 responses were collected through an online close ended questionnaire, and the statistical tool used for the quantitative data analysis is SPSS. Results of the study revealed that perceived security and perceived usefulness are significant factors that positively influence the behavioural intention to use e-wallets, while perceived ease of use and social influence were found to be insignificant in determining the behavioural intention in e-wallet usage. In terms of theoretical implications, this research has made a valuable contribution by providing a new literature review that can serve as a resource for future researchers interested in the adoption and expansion of TAM model within the FinTech industry, as perceived security as an extension of variables in this study was found to relate positively to behavioural intention. Consequently, this research can guide policymakers to understand the motivation behind usage of e-wallets among university students and find room for any technological improvements.

Keywords: Social Influence, perceived security, perceived usefulness, perceived ease of use, intention to use E-Wallet, University Students.

Introduction

E-wallets, or electronic wallets, have seen a rapid global rise in popularity due to their convenience and versatility in making digital payments. They function like traditional wallets but store digital currency on a smartphone app, allowing users to make payments using various methods, such as scanning QR codes and NFC technology (Alam, Awawdeh, & Muhamad, 2021). Recent reports indicate that e-wallets have become the dominant mode of payment, surpassing credit cards, both globally and in regions like Europe and North America (FIS Global, 2023). The international mobile wallet market achieved a value of \$269 billion in 2023, and it is expected to grow at a CAGR of 22%, reaching a market value of \$1965 billion by 2033 (Fact.MR, 2023). In Malaysia, e-wallets have gained significant traction, with providers like GrabPay, Boost, and Touch 'n' Go offering mobile payments, money transfers, and loyalty programs.

E-wallet transactions in Malaysia surged by 42% in 2020, driven by the COVID-19 pandemic's push for contactless payments. The government has also promoted e-wallet usage, allocating funds to initiatives like the ePemula program (Malaysian Digital Association, 2021).

Research studies have found that factors such as perceived usefulness, ease of use, perceived security, and social influence play crucial roles in driving e-wallet adoption in Malaysia (Kadir et al., 2020; Haron et al., 2021; Ali et al., 2021). In short, the paper focuses on understanding the factors influencing e-wallet adoption, including perceived ease of use, perceived usefulness, perceived security, and social influence, as e-wallets continue to reshape the way we make payments in an increasingly digital world. The rapid growth of e-wallets has offered an alternative and flexible payment method but has also raised concerns, primarily regarding security and privacy

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(Haron et al., 2021). Despite consumer trust in e-wallets, worries about the safety of personal and financial information online persist (Haron et al., 2021). Khoo et al. (2020) found that e-wallet users in Malaysia are vulnerable to phishing attacks and social engineering scams, emphasising the need for enhanced security measures. E-wallet systems still carry fraud risks, such as unauthorised access to user accounts, as demonstrated by a user who lost RM2,000 in Kuala Lumpur (New Straits Times, 2022).

Additionally, while the government and FinTech companies continue to improve e-wallet features, e-wallet usage has decreased (Statista, 2022). During the first quarter of 2022, 68% of Malaysians were e-wallet users, but by the fourth quarter, this figure dropped to 48%. One possible reason for this decline could be the positive financial sentiments among Malaysians as the economy rebounds, leading to a decreased reliance on touchless payment methods, post-COVID-19 restrictions. Notably, not all Malaysians have fully embraced e-wallet technology, despite over 40 licensed e-wallet operators (The Edge Malaysia, 2023). Razer (2023) identified three main concerns contributing to this hesitance. First, security concerns align with Khoo et al.'s findings (2020). Second, there's a worry about overspending, as people believe they spend more when relying less on physical cash. Lastly, low merchant acceptance plays a significant role, as stores accept multiple e-wallets, and users have experienced technical issues that erode trust.

Literature Review

TAM Model

Due to achieving the aim of the research while taking online consumer behaviour into consideration, the Technology Acceptance Model (TAM), is used as the main consolidate theory to support this research (Davis, Bagozzi and Warshaw, 1989). The usage of TAM as the foundation led to the creation of a behavioural model that describes the path to e-wallet usage intention among prospective users. TAM, developed based on the Theory of Reasoned Action, or TRA, seeks to predict the adoption and utilisation of

emerging information technologies (IT) and systems by determining the factors that contribute to the success of an organisation's information systems and their flexibility to accommodate changing business needs (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980).

Behavioural Intention (BI)

Behavioural intention to use (BI) is a crucial concept in the Technology Acceptance Model (TAM) for understanding the adoption of e-wallets (Tian et al., 2023). BI is influenced by two main factors: one's attitude toward e-wallet use and subjective norms, which relate to social influence. TAM suggests that perceived ease of use and perceived usefulness are key drivers of technology adoption (Davis et al., 1989). These factors can be used to predict or assess BI, while BI itself quantifies actual technology usage (Pertiwi et al., 2020). In the context of e-wallets, behavioural intention is often referred to as "e-wallet adoption" in the study of Teo, Law, and Koo (2020). It represents an individual's attitude, behaviour, or intention to use e-wallets and can also reflect the depth of their planned usage. Behavioural intention is linked to the actual usage of e-wallets and can convey various motivations that drive behaviour (Rahmadhani et al., 2022). Research has shown that a stronger intention to use e-wallets typically leads to higher actual usage, and vice versa (Phan et al., 2020). Furthermore, Yang et al. (2021), who investigated the influence of behavioural intention on the adoption of an e-wallet by studying cognitive feedback and user interface, found a strong positive effect. The behavioural intention in this study is related to consumers' decisions and responses to using e-wallets as a payment method. Researchers propose that intention may be able to convey the variety of individual motivations that drive behaviour (Patil et al., 2020).

Perceived Ease of Use (PEU)

Perceived Ease of Use (PEU) is a critical component within the Technology Acceptance Model (TAM), focusing on users' intention to use technology (Davis et al., 1989). According to TAM, PEU suggests that technological adoption is more likely when using

the technology involves minimal hassle for users. As defined by Tian et al. (2023), PEU reflects “the degree to which individuals perceive that utilisation of a specific system requires less cognitive effort on their part.” This concept is sometimes referred to as “convenience” in certain studies, where convenience signifies the ease and comfort in using a product or service (Chern et al., 2018). Another way to understand PEU is as “the freedom from complexity and difficulties associated with e-payment services” (Teo, Law, and Koo, 2020). In essence, when consumers find a system easy to comprehend and use, they are more likely to use and value it. A high level of perceived ease of use indicates that users can quickly grasp the functions of the application (Koo and Cuandra, 2022).

Consequently, improved usability and a reduced rate of errors can encourage more consumers to adopt and use e-wallets.

H1: There is a positive relationship between Behavioural Intention in E-wallet usage and Perceived Ease of Use.

Social Influence (SI)

Social influence, also known as “perceived social influence,” refers to the impact of others’ actions on an individual’s decisions (Janteng and Dino, 2022). It plays a significant role in determining the usage frequency of e-wallets. Yang et al. (2021) emphasised that consumer interest in using e-wallets can be assessed from the perspective of social influence, with family, friends, co-workers, or neighbors serving as potential persuaders for e-wallet adoption. Social influence, as described by Teo, Law, and Koo (2020), represents the effect that one’s peers have on their decision-making regarding a particular activity. Nisa and Solekah (2022) added that social influence is shaped by subjective norms and visibility. Subjective norms reflect societal pressures that influence consumers’ perceptions of acceptable behavior, while visibility pertains to how consumers’ decisions are influenced by observing the actions of others. In the context of technology adoption, individuals who are new to a particular technology often rely on the

guidance and credibility of more experienced users (Phan et al., 2020). This underscores the importance of social influence in technology adoption.

The Unified Theory of Acceptance and Use of Technology (UTAUT) incorporates social influence as one of its key variables, drawing from various theories like TAM, planned behavioural theory, and social cognitive theory (Venkatesh et al., 2003). UTAUT identifies eight scales that contribute to an individual’s behavioural intention, with performance expectations, effort expectations, and social influence directly impacting user intent. Notably, social influence in UTAUT takes into account demographic factors such as age, gender, and level of expertise when predicting technological adoption (Yang et al., 2021). Therefore, incorporating the variable of social influence into TAM is essential for obtaining comprehensive and optimal insights into technology adoption and usage.

According to Janteng and Dino (2022), perceived social influence significantly impacts the intention to use e-wallets especially during the pandemic. Besides being influenced by other people, customers nowadays are swayed into using e-wallets due to media exposure. The media would advertise the e-wallets in such a way that it appeals to and convinces the public to use the service. Moreover, in the context of the Covid-19 pandemic, usage of e-wallets was boosted when the Malaysian government implemented e-Tunai Rakyat as an incentive (Teo, Law and Koo, 2020). Patil et al. (2020) investigated that social influence was a significant predictor but brings a weak effect to affecting behavioural intention. Despite its weak effect, most users still consider their friends’ expectations when using e-wallets. Contrastingly, Phan et al. (2020) determined that social influence is the strongest predictor of behavioural intention to e-wallet usage. If an online payment service promotes e-wallets through ad campaigns or by the help of famous celebrities to raise product awareness among young consumers, social influence will make a positive impact on e-wallet usage. E-wallet referral programmes are an indicator that social influence affects BI in using e-wallets.

H2: There is a positive relationship between

Behavioural Intention in E-wallet usage and Social Influence.

Perceived Security (PS)

“Perceived security” refers to an individual’s confidence in the safety of a particular action, and it has been shown to directly influence their decisions regarding the adoption of new technology (Teo, Law, and Koo, 2020). In some articles, this variable is referred to as “privacy and security” (PS), highlighting its interrelationship with privacy (Koo and Cuandra, 2022; Phan et al., 2020). This combined concept addresses both the feeling of privacy and safety in technology usage.

Uncertainty in PS refers to the overall security state of a system, encompassing the ability to privately monitor one’s important information as privacy and feeling secure during online transactions as security (Phan et al., 2020). Users tend to experience a sense of privacy and security when they employ security measures such as passwords and account secrecy. In the study by Abbasi et al. (2022), “perceived security” is referred to as ‘security confirmation’ and defined as the verification of safety through the enhancement of security and reliability while reducing the likelihood of fraud. Similarly, Nisa and Solekah (2022) use the term ‘security’ and describe e-wallet security indicators as including security assurance and data confidentiality, aligning with the definitions mentioned earlier.

The concept of PS is also incorporated into the Unified Theory of Acceptance and Use of Technology (UTAUT), where Phan et al. (2020) integrates it through the Theory of Perceived Risk (TPR) proposed by Bauer (1960). According to TPR, perceived risks in consumer behaviour are often associated with the benefits received. It encompasses various cognitive risks such as information security risks, personal privacy risks, financial risks, social connection risks, convenience risks, and performance risks in the context of individual behaviour. According to Koo and Cuandra (2022), users would feel safe using an e-wallet if it has strong security and privacy features. Without this assurance, customers will be hesitant to use e-wallets and may perhaps abandon the concept

altogether. Hence, security could directly affect behavioural intention. Furthermore, Abbasi et al. (2022) highlighted that security confirmation had the second highest effect on behavioural intention in using e-wallets. They further elaborated that more attention should be given to security expectations as it could benefit managers in the long run. Correspondingly, concerns for security were the main barrier for 46% of non-e-wallet users to start using e-wallets, indicating that perceived security (PS) is an important factor in determining the intention to adopt e-wallets (Teo, Law and Koo, 2020). Sabli et al. (2021) stated that perceived security is significant towards acceptance of e-wallets as users will feel more confident using e-wallets if security issues are prioritized. Any government policies or company policies regarding security issues of e-wallets will affect user intention. Findings from Harto (2022) further supported the positive influence of PS towards behavioural intention in using e-wallets as they found that the greater the security, the greater the interest that users will display in using e-wallets. Meanwhile, Karim et al. (2020) posits that e-wallet users will be hesitant to adopt e-wallet technology unless their personal information is adequately protected.

H3: There is a positive relationship between Behavioural Intention in E-wallet usage and Perceived Security.

Perceived Usefulness (PU)

Perceived Usefulness (PU) is a critical component within the Technology Acceptance Model (TAM) and is considered one of its key elements. According to TAM, PU plays a pivotal role in driving decision-making when it comes to the widespread adoption of technology, as it relates to the technology’s ability to enhance user efficiency (Pertiwi et al., 2020). Essentially, TAM views PU as the capability of technology to perform tasks in a more efficient and effective manner while reducing the time required to complete them. The level of user engagement with technology is directly proportional to the efficiency with which that technology can be utilised (Davis et al., 1989).

In some studies, PU is referred to as “mobile perceived usefulness,” where it is seen as an individual’s confidence in a system’s ability to enhance their job performance (Chan et al., 2020). Alternatively, PU can be defined as an individual’s belief that using the system would lead to improved productivity (Yang et al., 2021). It represents a user’s mental projection of the system’s actual performance, instilling confidence in customers that the system can help them achieve their financial and lifestyle objectives while facilitating more efficient transactions.

PU, in the context of e-wallets, can also be defined as the extent to which customers believe they would benefit from using these services (Teo, Law, and Koo, 2020). Numerous studies have demonstrated a strong correlation between PU and increased output and efficiency, indicating a positive and significant relationship with the behavioural intention to use e-wallets. Furthermore, PU can be assessed through six metrics, including the amount of time saved, the level of performance improvement observed, increased user productivity, task simplification, and the perceived value of the tool (Nisa and Solekah, 2022). These metrics collectively help gauge the perceived usefulness of a system or technology.

Yang et al. (2021) concluded that it is paramount to give young customers more information on the values and attitudes that will encourage them to adopt e-wallets. As a result, consumers would view online transactions as a practical and intelligent option, which indirectly encourages them to continue using e-wallets in the future. Therefore, it is essential to emphasise the utility of e-wallets by providing young customers with a wide range of information about the usefulness of e-wallets. In the context of Covid-19 pandemic, it was viewed that the PU in e-wallets will increase intention to use as people were afraid of contracting the virus through physical money, hence e-wallets were seen as beneficial (Aji, Berakon and Husin, 2020). Furthermore, PU was proved to impact behavioural intention as e-wallets are a hassle-free alternative to traditional payment methods. PEU and PU are seen to be interrelated as the easier e-wallets are to adopt, the more they will be perceived as useful (Karim et al., 2020).

H4: There is a positive relationship between Behavioural Intention in E-wallet usage and Perceived Usefulness.

Perceived Ease of Use, Social Influence, Perceived Security and Perceived Usefulness influence on behavioural intention in e-wallet usage.

Behavioural intention in E-wallet Usage is found to relate positively to all four independent variables namely Perceived Ease of Use, Social Influence, Perceived Security and Perceived Usefulness. According to Kumar and Gupta (2021) and Mun et al. (2017), PEU has a significant effect on consumers’ intention to continue using e-wallets. This means that when users perceive an e-wallet system as useful in meeting their needs, they are more likely to continue using it. Subsequently, a number of other researchers have discovered that PS has a beneficial impact on the behavioural intention to adopt or use new technology. Therefore, PS is a key factor that favourably influences the acceptance and use of e-wallet systems, as research has consistently shown (Humbani, 2018; Karim et al., 2020; Nizam et al., 2018). Similarly to SI, Janteng and Dino (2022) argue that the perception of social influence has a major effect on the intention to use electronic wallets, especially in the context of the pandemic. Lai (2017) highlights that previous studies by Davis et al. (1989) and Leiva et al. (2017) demonstrate that the perceived usefulness (PU) construct has a positive and significant influence on the use of e-wallet systems.

H5: There are positive relationships between Behavioural Intention in E-wallet usage and Perceived Ease of Use, Social Influence, Perceived Security and Perceived Usefulness.

Research Gap

Confusion spotting gap was identified through the empirical literature review. This research gap was spotted when there was investigation into the topic, but the results were contradictory (Sandberg and Alvesson, 2011). In other words, confusion spotting gap points to previous works as inconsistent, thereby the contribution was regarded as insightful (Stenling

and Fahlén, 2022). For instance, there were various differing relationships investigated from previous researchers' findings between the independent variables and dependent variable above.

Research Framework

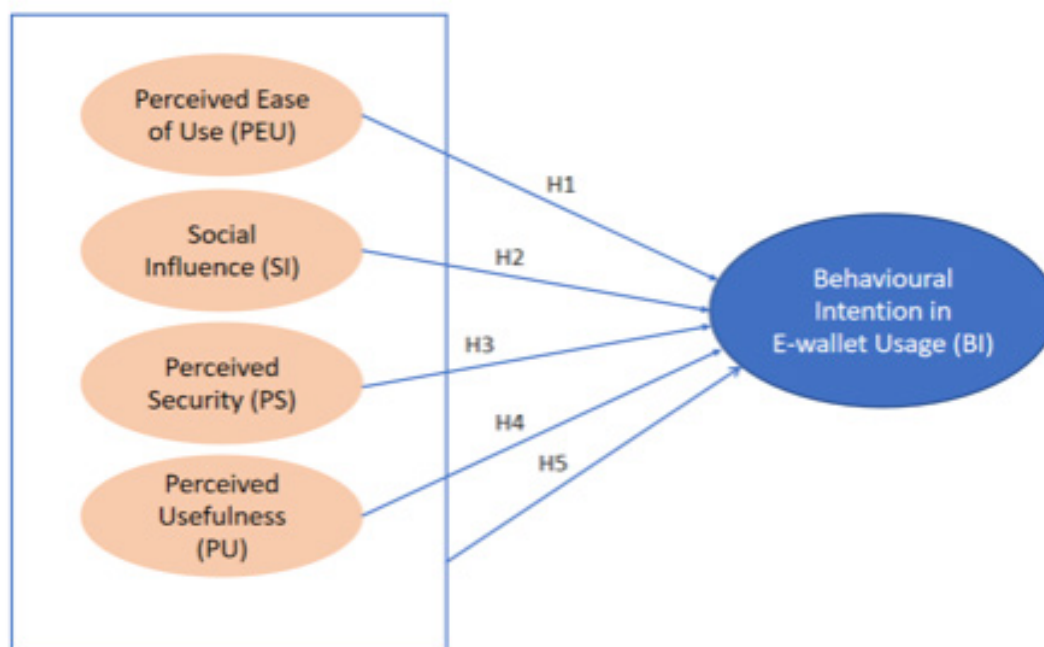


Figure 1: Research Framework

Methodology

Research Design

The goal of this research is to highlight the relationship between perceived ease of use, perceived usefulness, social influence, perceived security and behavioural intention in e-wallet usage. Quantitative methods will be used for analysis and data collection from respondents. As the data collected will centre on a large group of respondents with results quantified into statistics, quantitative research is primarily utilised. The positivist research philosophy forms the basis of this study. Furthermore, a survey research strategy of a questionnaire format would be incorporated due to its convenience in reaching a larger range of individual respondents and its ability to distribute and collect data for a large sample. For the primary data collection, online Google Forms will be

This study will be conducted as shown in the framework below. The dependent variable (DV) of behavioural intention in e-wallet usage shall be explained by the independent variables (IV) of perceived ease of use, social influence, perceived security and perceived usefulness.

utilised and sent out to respondents to fill out. Lastly, a pilot study will be carried out for the first 30 responses to test the reliability of the survey instruments.

Population and Sampling Technique

Convenience sampling, a form of non-probability sampling, would be applied to this study. The specific location for the targeted respondents will be in Subang Jaya. G*Power will be used as an indicator to determine the sample size. As suggested by G*Power, the minimum sample size should be 129 with 4 predictors and medium effect size (0.15) (Teo, Law and Koo, 2020). To increase the reliability of data collected for the research, the survey should only be done by current e-wallet users. Hence, respondents should only be university students based in Subang Jaya, current users of e-wallets and aged 18 and above.

Parameter	Value
Effect Size (Cohen's d)	0.15
α err prob	0.05
Power (1- β err prob)	0.8
Allocation ratio N2/N1	1

Table 1: Parameter of G* Power for sample size calculation

Data Analysis

The statistical tool used for data analysis is IBM SPSS version 29. To guarantee the accuracy, validity, and integrity of research results, data cleaning is an essential step in any research project. On top of past findings from other researchers to justify the impact each independent variable has on the behavioural intention of e-wallet usage, descriptive analysis which demonstrates the measurements of dispersion and variation to monitor the standard deviation will be utilised to determine the score spread. The Kolmogorov-Smirnov test, which is used to determine if a dataset follows a normal distribution, will be used for this study. Factor Analysis which identifies the underlying factors that explain the correlations among a set of observed variables in a study will be incorporated as well. A reliability test using Cronbach's Alpha will be used to determine how closely connected the items are and whether they all measure the same underlying concept in the instrument. Furthermore, both convergent and discriminant validity tests will be utilised. The responses will be analysed using the Pearson Correlation Analysis to calculate the degree and direction of the linear link between two continuous variables (Sabilla, Sarno and Triyan, 2019). Lastly, multi-regression analysis will be used to examine the effect of multiple components.

Results And Discussion

Respondents Background

Female respondents made up a total of 53.6%; male respondents totalled 45.8%, while 0.7% preferred not to say. The largest ethnicity group was Chinese (72.5%), followed by Indians

(15.7%) and Malays (11.8%). Meanwhile, 95.4% were Malaysians and 4.6% were not. Respondents aged 18-23 were the largest age group in the research, making up 79.7%, followed by the 24-29 age group (19%), and those aged 30-35 (1.3%). At least 9.8% of respondents obtained a Diploma, while the majority of respondents hold a bachelor's degree (75.9%). Master's degree holders accounted for 13.7% while professional or doctorate holders accounted for 0.7%. 85.6% of respondents were from local private institutions and 14.4% were based in local public institutions. 55.6% of respondents had an income level of less than RM1,000; 31.4% had incomes ranging from RM1,100 to RM3,000; 11.1% from RM3,001 to RM6,000 while the remaining 2% had a monthly income of RM6,000 and above. A majority of 95.4% of respondents were highly aware of the growth of e-wallets while 4.6% were only slightly aware. Most respondents (88.2%) had experience using e-wallets for more than 1 year; only 9.2% had used e-wallets for 6 months to 1 year, while the remaining 2.6% had only used e-wallets for less than 6 months. The frequency of using e-wallets per week was fairly distributed, with 22.2% using 1-5 times per week; 37.3% using 6-10 times per week, and 40.5% respondents using e-wallets for over 10 times a week.

Measurement Model Outcome

Reliability and Convergent Validity

Table 1 below shows the value of Cronbach's Alpha for each variable. All the variables obtained a value above 0.7, which is consistent with findings of Hair et al. (2010). Hence, the variables were deemed reliable for further data analysis. As the threshold for loading factor was 0.6, components with value less than 0.6 were removed from the test (Wanz, 2017). Hence, PEU3, SI4, and BI4 were removed, resulting in the final loading values shown in the table. Cheung et al. (2023) posits that convergent validity is fulfilled when AVE values are 0.5 or greater and CR values are 0.7 or greater. Based on this general rule of thumb, all variables reached the threshold, hence there was adequate convergent validity.

Table 1: Measurement model outcome

Construct	Loading	Cronbach alpha	CR	AVE
<i>Perceived Ease of Use (PEU)</i> 1. I can easily learn how to use e-wallets. 2. I can quickly become proficient in using services of e-wallets. 3. The procedures of e-wallets are simple to me. 4. The interface of e-wallets is user-friendly and easy to understand.	0.773 0.786 (removed) 0.717	0.726	0.803	0.576
<i>Social Influence (SI)</i> 1. Family and people who are important to me affect my intention to use e-wallets. 2. Friends and colleagues affect my intention to use e-wallets. 3. The media and advertisement affect my intention to use e-wallets. 4. I use e-wallets because the people I know also use it.	0.716 0.749 0.686 (removed)	0.741	0.761	0.514
<i>Perceived Security (PS)</i> 1. I would feel secure using my credit/debit card information through e-wallet systems. 2. E-wallet systems are secure to send/use sensitive information. 3. I would feel totally safe by providing information about myself over the e-wallet systems. 4. Overall, the e-wallets are safe systems to transmit sensitive information.	0.778 0.795 0.837 0.685	0.821	0.857	0.602
<i>Perceived Usefulness (PU)</i> 1. Using e-wallets saves my time. 2. E-wallet is a practical option in making payment. 3. Using e-wallet makes it easier for me to carry out my day-to-day tasks. 4. Using e-wallet is the trend of the modern lifestyle.	0.791 0.792 0.725 0.718	0.822	0.843	0.574
<i>Behavioural Intention on E-wallet Usage (BI)</i> 1. I intend to use e-wallet for my payments in the future. 2. I will always try to use e-wallet payments during purchasing things. 3. I will recommend that others use e-wallet payments for purchasing. 4. E-wallet payments would be one of my favourite technologies for payment.	0.685 0.792 0.741 (removed)	0.811	0.784	0.549

Discriminant Validity

Table 2 above shows the results of square root average variance extracted which is derived from the value of AVE from Table 1. The values in bold indicate the square root of AVE, while the other values indicate the correlation between the constructs. As all bold values were higher than the other values in its row, it is concluded that discriminant validity was achieved (Muhamad Safih and Nor Azreen, 2016). Hence, the result confirmed that the Fornell and Larker's criterion of discriminant validity was met.

Pearson Correlation Analysis

Table 3 on the other hand shows the outcomes of the Pearson Correlation Analysis, which assesses the linear relationship between the dependent and independent variables. Based on the results, the correlation coefficient of 0.395 between PEU and BI indicates a moderate degree of correlation. It could be implied that among students at Diploma level and above in Subang Jaya, merely a moderate level of PEU corresponds to a greater intention to use e-wallets. Similarly, SI exhibits a moderate correlation with the intention to adopt e-wallets, with a correlation coefficient of 0.380. This suggests that a moderate level of SI is associated

with the BI of youths to use e-wallets in Subang Jaya. As this generation is quite easily influenced by their peers, it could be said that SI affects the students' intention to use e-wallets to a certain degree if they are surrounded by friends or families that constantly use e-wallets. Moreover, PS also displays a moderate correlation with BI, indicated by a correlation coefficient of 0.371. Among Gen Z students in Subang Jaya, it could be inferred that they still take heed of the safety of their

private information online while using e-wallets. In contrast to the other independent variables, PU demonstrates a higher correlation with the intention to invest with a value of 0.576. This value indicates that there is a strong correlation between the two variables. This could be due to Gen Z students in Subang Jaya prioritising the practicality of e-wallet applications as they do not want to waste their time and effort on e-wallets that they do not view as useful.

Table 3: Pearson Correlation Analysis

		PEU	SI	PS	PU	BI
PEU	Pearson Correlation	1	0.372	0.170	0.444	0.395
	Sig (2-tailed)		<0.001	0.037	<0.001	<0.001
	N	150	150	150	150	150
SI	Pearson Correlation	0.372	1	0.413	0.308	0.380
	Sig (2-tailed)	<0.001		<0.001	<0.001	<0.001
	N	150	150	150	150	150
PS	Pearson Correlation	0.170	0.413	1	0.328	0.371
	Sig (2-tailed)	0.037	<0.001		<0.001	<0.001
	N	150	150	150	150	150
PU	Pearson Correlation	0.444	0.308	0.328	1	0.576
	Sig (2-tailed)	<0.001	<0.001	<0.001		<0.001
	N	150	150	150	150	150
BI	Pearson Correlation	0.395	0.380	0.371	0.576	1
	Sig (2-tailed)	<0.001	<0.001	<0.001	<0.001	
	N	150	150	150	150	150

Multiple Regression Analysis.

According to Table 4, there is a value of 0.636 for the correlation coefficient, indicating that a positive linkage between behavioural intention to use e-wallets and perceived ease of use, perceived usefulness, perceived security and social influence. Furthermore, it could be seen that the coefficient of determination (R-square) is 0.405. It could be

interpreted that 40.5% of the variation in behavioural intention to use e-wallets can be explained by the four independent variables, while 59.5% can be explained by other variables. A possible explanation for this moderate R-square could be due the confusion spotting gap where each variable obtained mixed results from past research, hence the variables were inconsistent in determining the behavioural intention in e-wallet usage.

Table 4: Multiple Regression Analysis.

Hypothesis	Variable	Beta	T-statistic	P-value	Decision
H1	PEU	0.128	1.721	0.087	Not Supported
H2	SI	0.138	1.840	0.068	Not Supported
H3	PS	0.153	2.105	0.037	Supported
H4	PU	0.426	5.696	<0.001	Supported
F-value	24.658			<0.001	
R		R²	Adjusted R²	Standard error of the Estimate	
0.636		0.405	0.388	0.76924	

From Table 4, an increase of 1 unit in PEU is associated with an average increase of 0.166 units in behavioural intention to use e-wallets (BI) and vice versa. The statistical test conducted at a significance level of 5% yielded a p-value of 0.087, indicating that the first hypothesis (H1) is rejected as it is more than 0.05. Thus, there is an insignificant positive relationship between PEU and BI. Regarding SI, the unstandardized coefficient is 0.165, indicating that a 1-unit increase in SI is associated with an increase of 0.165 units in BI, and vice versa. However, the p-value for this independent variable is 0.068, which is greater than 0.05. Consequently, the second hypothesis (H2) is not accepted, indicating an insignificant positive relationship between SI and BI. The unstandardized coefficient for PS is 0.154. This suggests that a 1-unit increase in PS is associated with an average increase of 0.154 units in PS, and vice versa. The variable has a p-value of 0.037, leading to the acceptance of the third hypothesis (H3) as p value is <0.05. Thus, there is a significant positive relationship between PS and BI. In the case of PU, the unstandardized coefficient is 0.438, indicating that a 1-unit increase in PU is associated with an average increase of 0.438 units in BI, and vice versa. The p-value for this independent variable is <0.001. As a result, the fourth hypothesis (H4) is accepted, indicating a significant positive relationship between PU and BI. The most significant variables influencing Behavioural Intention on E-wallet Usage (BI) for university students in Subang Jaya that was suggested by this study would be perceived security (PS) and perceived usefulness (PU).

According to the multiple linear regression to test H5, the regression model is significant as $F(4, 145) = 24.658, p < 0.001$. The regression sum of square valued at 58.363 shows that a significant amount of variation in the dependent variables is explained by the model. Furthermore, under the circumstances of 5% significance value, the F-statistic value of 24.658 is greater than the critical value of 2.47. Hence, the regression model is deemed significant. Moreover, the p-value of 0.001 is sufficient to reject the null hypothesis. Thus, it is concluded that there is a strong and statistically significant association between the independent variables and the dependent variable. This model equation is formed as shown below:

$$BI = 0.346 + 0.166PEU + 0.165SI + 0.154PS + 0.438PU + \epsilon$$

Discussion of Findings

The first research objective was to investigate the relationship between perceived ease of use and behavioural intention in e-wallet usage. Based on the test results, it could be determined that there is an insignificant relationship between BI in e-wallet usage and PEU. Findings are consistent with Phan et al. (2020); Abdul-Halim (2021) and Hapsoro and Kismiatun (2022) where they found that there is an insignificant relationship between these two variables. As elaborated by Phan et al. (2020), they perceive that youths are not bothered by the difficulty of using e-wallets as they are normally fast learners and can easily learn how to use

e-wallets. Meanwhile, statements made by Phan et al. (2020) and Abdul-Halim (2021) regarding PEU not being able to influence BI directly are confirmed by the results. It could be comprehended that there must be a mediator between PEU and BI to have any effects. The results reveal that the convenience factor will not necessarily affect university students in Subang Jaya in the use of e-wallets. A possible explanation could be e-wallets are already quite widely established in Malaysia and are a huge part of Malaysian's lives, hence there is no concern for the PEU of e-wallets. E-wallet providers are constantly expanding in the context of Malaysia, for instance e-wallets are now widely available in healthcare services as stated in the Twelfth Malaysian Plan (Institute of Corporate Directors Malaysia, 2021).

The second research objective was to examine the relationship between social influence and behavioural intention in e-wallet usage. Results demonstrated that there was an insignificant relationship between these two variables. This result is in line with findings from Aydin and Burnaz (2016); Puasa et al. (2021); Mangalam, Adnani and Mangalam, Adnani and Yong (2022) where they discovered that SI has an insignificant relationship with the BI of e-wallet usage. The statement by Mangalam, Adnani and Yong (2022) regarding social influence losing its effect on determining the BI to use e-wallets since the pandemic can be confirmed. Since the pandemic, consumers have been using e-wallets due to the need to reduce physical contact payments, not due to the influence by their peers. This could be supported by Mohammad (2023), where it was found that rather than being influenced by peers, Malaysians use e-wallets to reduce transactions that require physical contact ever since the pandemic.

The third research objective was to look into the relationship between perceived security and behavioural intention in e-wallet usage. It was revealed that there was a significant positive relationship between the two variables. Findings were supported by past researchers Koo and Cuandra (2022); Abbasi et al. (2022); Teo, Law and Koo (2020); Sabli et al. (2021); Harto (2022); Karim

et al. (2020) where they investigated the significant positive relationship between these two variables. The statement of PS being one of the main barriers for non-e-wallet users to start adopting the service by Teo, Law and Koo (2020) could be confirmed by the test results. It shows that Gen Z students in Subang Jaya prioritise the safety of their personal information before deciding to use e-wallets. If the e-wallets provide high enough security to protect sensitive information such as credit card numbers, personal addresses and so on, it could gain trust of consumers, which in return will lead to increased BI in using e-wallets. The result was proven to be true as the constant increase in Touch N Go safety measures has induced a growing number of TNG users (The Star Online, 2023).

Meanwhile, exploration of the relationship between perceived usefulness and behavioural intention in e-wallet usage is the fourth research objective. Results show that there is a significant positive relationship between the two variables. When there is an increase in perceived usefulness of e-wallets, there will likely be an increase in the behavioural intention to use e-wallets among university students in Subang Jaya. For instance, TNG provides a wide variety of services other than digital payments, such as paying for tolls, e-commerce shopping, paying bills, GOinvest and so on (Touch 'n Go, 2023). The services could increase students' perceived usefulness, which will result in increased usage of TNG. It seems that the practicality of an e-wallet could deeply impact the BI to use e-wallets. It shows that the behavioural intention in e-wallet usage among university students in Subang Jaya will increase when there is an increase in perceived security. Results were in line with findings from Yang et al. (2021); Aji, Berakon and Husin (2020); Karim et al. (2020); Himel et al. (2021); Chan et al. (2020); Tian et al. (2023) where they found a significant positive relationship between these two variables.

Finally, the multi regression result revealed that when all the four independent variables were combined and regressed against the dependent variable, only perceived security and perceived usefulness variables had significant influence

on behavioural intention to use e-wallet. Hence, the university students in Subang Jaya preferred e-wallets as their purchasing instrument because of security and necessity aspects which were crucial to their student lifestyle.

Study Implication

Theoretical Implication

With the predictors of attitude and intention in mind, this study adopted the Technology Acceptance Model (TAM) with two additional antecedents: social influence and perceived security. However, although perceived ease of use is one of the main variables for TAM, results from this study revealed that PEU has an insignificant relationship with the behavioural intention to use e-wallets. Instead, perceived security which was added to this study shows a positive relationship with BI. Therefore, this research has made a valuable contribution by providing a new literature review that can serve as a resource for future researchers interested in the adoption and expansion of the Technology Acceptance Model (TAM) within the FinTech industry.

Policy Implication

The study's findings can help policymakers understand what motivates university students to use e-wallets. With this knowledge in hand, policymakers will be better equipped to advance e-wallet adoption, paving the way for more convenient and secure online transactions. For example, incentives or subsidies could be introduced to encourage youths to adopt e-wallets. Furthermore, businesses, particularly those in the Fintech sector, can use the study's findings to inform the creation of marketing and product strategies aimed specifically at young consumers. When businesses understand how youths perceive e-wallets, they can better cater to their wants and interests. For instance, features such as gamification, social integration, and loyalty programmes tailored to the needs of the students and youths could be integrated or upgraded. Other than benefiting established Fintech businesses, the

study's findings could also provide information for potential young entrepreneurs and policy makers of the Fintech industry who are planning to target youths as their main consumers.

Limitation and Future Studies

As 59.5% of the variation is explained by other factors, future researchers could include other significant determinants in their studies to investigate the remaining influential variations. Consequently, future studies could increase the sample size to at least 200 and above for increased accuracy of the findings. Lastly, it is recommended that future research be expanded to other regions, such as Kuala Lumpur, or even Malaysia in general to get more explicit research findings on this topic and increase the generalizability.

Conclusion

In summary, this research paper has investigated the behavioural intention of university students in Subang Jaya in their e-wallet usage, examining the effects of four independent variables of perceived ease of use, social influence, perceived security and perceived usefulness. The main theory applied to the study is the Technology Acceptance Model (TAM). Data collected from 150 respondents was analysed using IBM SPSS, where data was analysed through descriptive analysis, normality test, factor analysis, reliability and validity test, Pearson Correlation test and multiple linear regression. Statistical results reveal that perceived ease of use and social influence had an insignificant relationship with the behavioural intention in e-wallet usage, while perceived security and perceived usefulness had a significant positive relationship with the behavioural intention in e-wallet usage.

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