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Factors Influencing Adoption of E-Wallet Among Malaysian Young

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Abstract

In the advanced technology world, there is a noticeable increase in cashless transactions in our daily lives. Due to that, fintech products such as E-Wallets are mushrooming and well-known worldwide to replace from cash-based to cashless. Mostly, the user is coming from generation Y around 25 to 29 years old. This study examines the factor influencing E-Wallet adoption among Malaysian young adults. Extended Technology Acceptance Model has been used as a theory in this study. For the methodology, researchers use quantitative methods by distributing questionnaires to UiTM graduates via online platform. Data were analyzed using the Statistical Package Social Science (SPSS). The results of this study indicate that perceived usefulness, social agent, and privacy and security are significant factors influencing the adoption of E-Wallets among Malaysian young adults. This research aids digital marketplace service providers in better providing the benefits of using an E-Wallet for transactions.

Keywords: Behavioral Intention, E-Wallet, Perceived Usefulness, Social Agent, Privacy and Security

Introduction

People now utilize the internet on a daily basis because it has made their lives easier in recent years. The same holds true for payments made using smart devices. The term "mobile wallet" or "E-Wallet" refers to the usage of a mobile device to conduct payment transactions in which money or funds are sent from the payer to the recipient through an intermediary or without an intermediary. A form of technological development in the area of financial systems is the use of electronic wallets or "E-Wallets" (Wulantika & Zein, 2020). An E-Wallet is a particular kind of digital wallet that enables users to attach a debit or credit card to the wallet and complete any kind of payment transaction (Digital Wallet, 2019). An E-Wallet can be used by individuals to store and update their financial data and make payments. In contrast to debit or credit cards, Ray (2017) claims that electronic cards let users save their physical card information and bank account information to make particular payment operations.

Therefore, mobile or smartphone devices are more frequently used by the general population; mobile applications are thought to develop more quickly. The payments made using e-wallets are a much easier and faster action than regular transactions that need to log in to the internet banking. Payments made through E-Wallets are more convenient than

payments made through traditional banking systems since they save time and money (Blockchains, 2018). According to Gokilavani et al (2018), the primary function of a payment system is to facilitate transactions, and payments are done via mobile applications because consumers prefer this method.

Due to the rapid development of information technology, it is now possible to distinguish payment systems by adding distinctive properties. The advent of E-payment technologies is encouraging consumers to convert from cash to cashless transactions, but the transition to a cashless economy is difficult given how deeply embedded the present cash-based trading patterns are (Yaokumah, Kumah & Okai, 2017). But one of the many reasons why E- Wallets are growing in popularity in Malaysia is the ease with which cash can be transferred, followed by security and cost savings (Nizam, Hwang & Valaei, 2018). Digital wallet usage has risen in Malaysia in recent years. AEON Wallet, Boost BigPay, GrabPay, WeChat pay, and Touch'n Go eWallet, are the most popular and widely used e-wallets in Malaysia.

Based on analysts by Statista Research Development (2020), the number of smartphone users from 2014 to 2020 continues to increase from year to year.

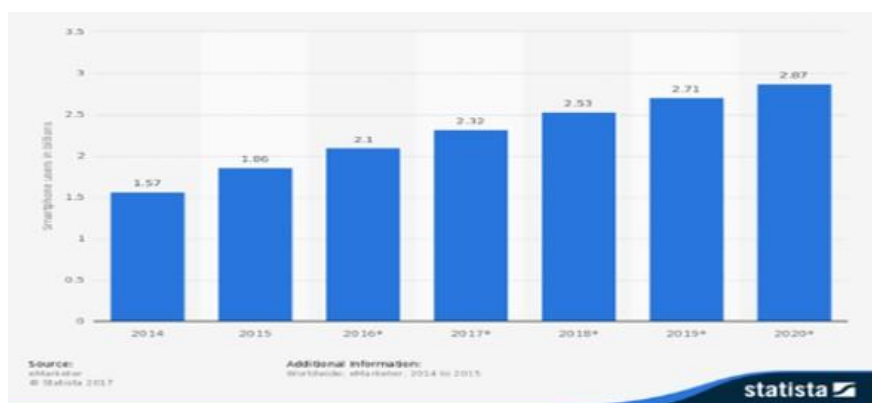


Figure 1.1: Number of Smartphone users worldwide from 2014 to 2020

It shows that the concept of an electronic wallet predates the current period. Everything began as the number of smartphone users increased year after year, and people began to use digital payments, which are now referred to as E-Wallets. The result is that fintech products are evolving nowadays, and many fintech companies are trying to produce and offer digital payment services. With more than 500 million mobile payment customers, the Alipay and WeChat Pay mobile wallets enjoyed a 92 percent market dominance in the mobile payment sector (Teng & Khong, 2021). Furthermore, customer trust in brands and services influences customer acceptance of fintech.

Research Objectives

This research aims to examine the factors influencing the adoption of E-Wallets among Malaysian young adults. The attributable factors chosen in this research, with their specific research objectives, are as follows:

RO1: To determine whether perceived usefulness will influence behavioral intention of E-Wallet adoption among Malaysian young adults

RO2: To determine whether the social agent will influence behavioral intention of E- Wallet adoption among Malaysian young adults

RO3: To determine whether privacy and security will influence behavioral intention of E-Wallet adoption among Malaysian young adults

Literature Review

Perceived Usefulness

Perceived usefulness describes how much a person thinks using a particular information system will boost their productivity (Davis, 1989). A person's conviction that implementing a particular system will increase their performance at work is known as perceived usefulness (Ulfiy et al., 2020). One of the crucial elements of Extended Technology Acceptance Model (TAM) is perceived usefulness (Teo et al., 2020).

Studies in the past have discovered a favorable impact of usefulness on consumers' attitudes or intentions (Shin, 2019). There were several methods to explain the idea of behavioral intention or intention to use. Yeh and Tseng (2017) stated that it was looked into if students intended to use mobile payments. In the past, researchers have examined the variables that affect people's decisions to adopt or use systems and technology (Madan and Yadav, 2016). According to Yi and Hwang (2003), self-efficiency, enjoyment, learning objectives, and technological adoption all have an impact on how people use web-based information systems. Barry and Jan's (2018) revealed a positive and substantial association between behavioral intention to use a certain technology and perceived usefulness.

Social Agent

According to Prabhakaran, Vasantha, and Sarika (2020), social agents had a considerable impact on the intention to use mobile wallets. Family members, friends, teachers, partners, and public personalities are just a few examples of the many sources of social influence (Megadewandanu et al., 2017). When it comes to the adoption of mobile wallets, social influence has a positive effect on consumer behavior (Megadewandanu et al., 2017). In plainer terms, it has to do with how family and friends affect how a person uses technology. People's attitudes and ideas are impacted by interpersonal influence, which can also lead to agreements (Laywilla et al., 2020). A survey by Leng and Lada (2011), societal influences had a moderate effect on customers' intentions to use mobile payments. According to Khatimah et al (2019), consumers' intentions to use E-money were also found to be positively influenced by social agent. However, another research by Kwateng, Atiemo and Appiah (2019) found that social agent did not significantly impact consumer's intention to adopt systems or technologies.

According to Venkatesh (2000), he found that adopting new technologies for day-to-day activities is influenced by social agent. Sudeep (2007) also found that the usage of advanced technology has a social impact on users since they feel more connected to modern culture. However, some previous research has found that social agent has a favorable effect on the intention to use mobile payment, while others have found no direct influence (Yong et al., 2018).

Privacy and Security

The ability to actively monitor information that is relevant to oneself is known as privacy (Cliquet et al., 2015). Reduce network and data concerns, whereas security refers to a set of

techniques and procedures for verifying the information's origins and ensuring its privacy and integrity (Mastor, 2021). One of the concerns that prevents purchasers from purchasing goods unless they are safeguarded is a lack of security and privacy (Milberg, Smith & Bruke, 2000). As a result, it is claimed that the E-Near Wallet's Field Communications (NFC) feature gives users a secure environment in which to carry out commercial transactions quickly and effectively (Teo et al., 2020). It is about maintaining client security throughout E-payment system transactions.

Payments made using an E-Wallet without security safeguards, may result in unauthorized access to personal information and an opportunity for hackers to acquire the data (Kaur, 2020). Customers who are unfamiliar with technology may worry about their privacy and security (Ulfy et al, 2020). Fraud risk is reduced by the fact that digital transactions are frequently safer and easier to follow. Many studies also concurred that security has a strong positive relationship to affect how people utilize electronic wallets (Kabir et al., 2017). Rathore (2016) claimed that although security is not a significant factor in determining whether consumers would use e-wallets, it is the most challenging one.

Behavioral Intention of E-Wallet Adoption

For the convenience of transactions using a password, QR code, or face image, an E- Wallet is a digital version of a physical wallet that contains digitised information, such as personal payment method credentials (Krisna, 2017). Despite Malaysians' widespread use of smartphones, which suggests a sizable market for e-payments, the E-Wallet industry is still in its infancy, with the majority of use cases concentrated in the food and beverage and transportation sectors, where a slew of players are spending heavily to acquire customers and merchants (Yennie, 2018). Users frequently use the terms "E-Wallet" and "mobile wallet" interchangeably (Teo et al., 2020). Compared to China, the second-largest economy in the world, Malaysia has a big number of E-Wallet suppliers. There are about forty (40) E-Wallet services in Malaysia, which has a population of 32 million people, compared to only two in China, which has a population of 1.5 billion people (Ganeshwaran, 2019).

The course of action that a person plans to take might be referred to as their intention (Zhao et al., 2010). E-Wallet adoption in this study refers to a user's mindset, actions, or intention to use an E-Wallet (Teo et al., 2020). Schwartz (2019) found that behavior, often known as an intention to act, is a set of guidelines that describe what a person is doing, how that behaviour is carried out, or what was achieved. The age factor is related to the desire to adopt an E-Wallet. Young people's financial experiences have always been accompanied with emotions. How satisfied customers are with mobile services is influenced by feelings like joy and fun (Kumar & Lim, 2008). Payment by E-Wallet is currently one of the most popular transaction methods since electronic transactions utilizing a digital wallet offer ease of use, usefulness, and security (Uddin et al., 2014). According to (Raimee et al., 2021), there are top three Digital wallet companies in Malaysia as below: -

1. Boost

On the App Store and Play Store, Boost is no longer just another mobile payment app. It takes pride in being the first and only secure and lucrative lifestyle digital wallet app in Malaysia. At all hours of the day, Boost is committed to giving users a worry-free experience with cashless mobile payments. Due to its partnerships with 17 institutions, including Maybank, CIMB, RHB Bank, Public Bank, and Hong Leong Bank, topping up on the Boost app is an easy process.

2. Touch 'n Go wallet

A smartphone app called Touch 'n Go wallet combines the physical Touch 'n Go Card with the features of a digital wallet. To make transaction monitoring simple, users can enter the Touch 'n Go card number. Two more daily-use capabilities on the app include payments for cinema tickets and money transfers across TnG E-Wallets. The programmers also let users to top up their E-wallets for paying tolls, buying plane tickets and shopping at associated stores.

3. GrabPay

Grab is one of Southeast Asia's most popular e-hailing apps, and they're unique in offering a digital wallet called GrabPay, which has been available in Malaysia since 2018. GrabPay makes it easy to pay for Grab vehicle trips and GrabFood and purchases made at connected businesses, including restaurants and movie theaters.

Many researchers discovered a favorable and significant link between behavioral intention and the adoption of new technology (Barry and Jan, 2018). According to Davis (1989), Technology Acceptance Model was developed (TAM) to acquire a better understanding of customers' behavioral intentions to adopt a given (TAM) technology. The TAM model is helpful for describing how people respond to the introduction of sophisticated technologies (Raimee et al., 2021).

Theoretical Framework

Extended Technology Acceptance Model (TAM)

The reasons why consumers want to use technology have given rise to several theories. The literature has done a lot of research on the TAM model (Davis, 1989). TAM is a helpful method for assessing the acceptability of technology. The TAM's objective is to illustrate how external factors affect interior attitudes, intentions, and beliefs. It provided a credible illustration of potential applications for technology (Hu et al., 1999). TAM also has a propensity to assume that there is just one technology option available to users and that there are no other possibilities, which is untrue. The uptake of mobile services may be hampered by pricing, for instance, and other factors like social impacts may have a large impact on mobile applications.

In academic research, TAM is regarded as a well-recognized extension to look at the adoption and usage intentions of new technologies (Aydin et al., 2016). However, it's possible that the initial TAM variables did not fully represent the underlying presumptions that shape consumers' attitudes toward online shopping. Privacy and security are one of the additional factors that have been found to positively influence behavioral intent to use new technologies (Barry et al., 2018). Some research has included privacy and security as one of the extra elements to examine the behavioral intention to use the E-Wallet (Barry et al., 2018).

Research Framework

In this study, the research framework is based on the theoretical underpinning of the Technology Acceptance Model (TAM) theory. This theory describes the relationship between the dependent variable (behavioral intention of E-Wallet adoption) with the independent variables perceived usefulness, social agent and privacy and security. The research framework for this study is represented in Figure 2.1 below:

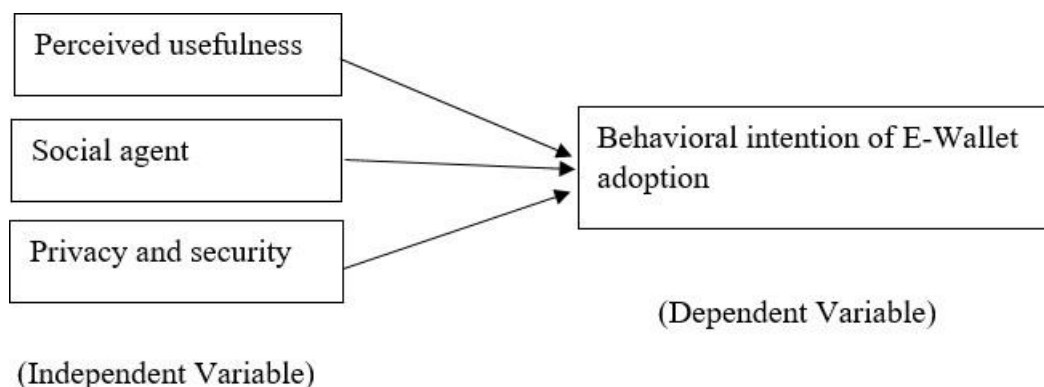


Figure 2.1: Research Conceptual Framework

Three independent factors that were derived from the dependent variable are shown in the research framework. Perceived usefulness, social agent, privacy, and security are the independent factors. The dependent variable's variation is explained by the independent factors. The behavioral intention to use an E-Wallet is the dependent variable in this study. The researcher's focus is on the dependent variable. Understanding, predicting, or explaining the variability of this variable is the aim of the research. The conceptual research framework shown in Figure 2.1 is the foundation upon which the hypotheses are built.

Methodology

A quantitative research and questionnaire techniques are employed in this research. The questionnaire consists of two sections. First section contains the demographic background of respondents, such as age, gender, occupation level, working experience, and monthly income and includes the introduction of the E-Wallet. Second section is based on the dependent variable (DV) of the study, which is behavioral intention to use an E-Wallet, whereas independent variables (IVs) are perceived usefulness, social agent and privacy and security.

For the population, according to statistic from (UiTM Website, 2021) the population of UiTM Graduates is 33,344 which are under category of 30,000 to 40,000 populations. According to Krejcie and Morgan (1970), 380 questionnaires should suffice, but to avoid missing data or data blurring, this research delivered 400 questionnaires to UiTM graduates. Therefore, 400 questionnaires are distributed to UiTM graduates. Questionnaires construct with Likert-scale questions. The data contained in the returned questionnaires were analyzed using Statistical Package for Social Science (SPSS) software.

Finding and Discussion

Descriptive Analysis

Descriptive Analysis on The Dependent Variable

This section reflects on the expected behavioral intention of respondents to use E- Wallet, which is the dependent variable. Core pattern and dispersion descriptive statistics (means and standard deviations) were used to present the data obtained from the questionnaire. Means significance tests the respondents' acceptability, while standard deviation simply measures the data concentration around the mean. According to Field (2013), when the data are clustered around the mean, the standard deviation is minimal. This would provide a more natural distribution of the bell-shaped curve, while a broad standard deviation means that

the data extend further from the mean and the data distribution is relatively flatter than the normal distribution of the bell-shaped curve.

Based on Table 4.1, descriptive analysis on dependent variables of behavioral intention to use E-Wallet, the overall mean on a 5-point Likert scale and standard deviation for all items were between 4.06 and 4.37. The scores of standard deviations for the items indicate that the dispersion of data through the means does not vary too much and that the views of the behavioral intention to use E-Wallet statement of the actual respondents do not vary too much between each other, and the average reflects the data well.

Table 4.1

Descriptive analysis on behavioral intention of E-Wallet adoption

	N	Mean	Std. Deviation
I feel that using E-Wallet is a good idea.	400	4.37	.869
I like the concept of using E-Wallet.	400	4.30	.893
I feel good about using E-Wallet.	400	4.20	.970
I think using E-Wallet is enjoyable.	400	4.06	1.021
I value the benefits of using E-Wallet.	400	4.23	.882
I would like to do transactions using E-Wallet services in the future.	400	4.30	.816
It is likely that I will use my smartphone to pay at the point-of-sale.	400	4.25	.813
I will frequently use E-Wallet services in the future.	400	4.29	.926
I intend to recommend others to use E-Wallet services.	400	4.21	.862
I intend to share the benefits of using E-Wallet services with others.	400	4.19	.885
Valid N (listwise)	400		

Descriptive Analysis on The Independent Variables

This section discusses the perceived usefulness, social agents and privacy and security of the respondents, which is the independent variables.

Perceived Usefulness

This section examines the perceived usefulness towards behavioral intention to use E- Wallet. Based on Table 4.2, descriptive analysis on independent variable of perceived usefulness which overall mean on a 5-point Likert scale and standard deviation for all items under perceived usefulness were between 3.96 and 4.37. The scores of standard deviations for the items indicate that the dispersion of data through the means does not vary too much and that the views of the perceived usefulness statement of the actual respondents do not vary too much between each other, and the average reflects the data well.

Table 4.2

Descriptive analysis on independent variable of perceived usefulness

	N	Mean	Std. Deviation
I think using E-Wallet services would enable me to make transactions more quickly.	400	4.29	.887
I believe E-Wallet services would be useful for conducting online transactions.	400	4.24	.885
I believe using E-Wallet services would improve my efficiency of online transactions.	400	4.26	.881
I think using E-Wallet services would make it easier for me to make online payments.	400	4.14	.996
I think using a E-Wallet services would improve my performance in purchasing.	400	3.96	1.097
I believe step-by-step navigation of E-Wallet services is easy to understand.	400	4.07	1.032
I believe learning to use E-Wallet services is easy.	400	4.21	.972
I like the fact that payments done through E-Wallet services require minimum effort.	400	4.26	.996
I believe it is easy to transfer money via E-Wallet services as minimum steps are required.	400	4.26	.939
Overall, I think E-Wallet services are easy to use.	400	4.37	.969
Valid N (listwise)	400		

Social Agents

This section examines the agreeable of respondents on social agents. Based on Table 4.3, descriptive analysis on independent variable of social agents which overall mean on a 5- point Likert scale and standard deviation for all items under social agents were between 3.19 and 3.99. The scores of standard deviations for the items indicate that the dispersion of data through the means does not vary too much and that the views of the social agents statements

of the actual respondents do not vary too much between each other, and the average reflects the data well.

Table 4.3

Descriptive analysis on independent variable of social agents

	N	Mean	Std. Deviation
People influence my behavior that I should use E-Wallet services.	400	3.78	1.052
My friends influence me to use E-Wallet services.	400	3.84	1.094
Using E-Wallet is considered a symbol of status among my friends.	400	3.35	1.317
People who are important to me expect me to use E- Wallet technology.	400	3.55	1.232
I will use the E-Wallet recommended by the people close to me	400	3.67	1.270
I believe that using E-Wallet services will fit my lifestyle.	400	3.99	1.064
I felt that my self-image and status have improved after I have started using E-wallet.	400	3.62	1.157
I will use E-wallet because most people use it too.	400	3.72	1.174
I started to use E-Wallet after seeing ads on television.	400	3.45	1.267
I use E-Wallet because my favorite actors use them.	400	3.19	1.490
Valid N (listwise)	400		

Privacy and Security

This section examines the agreeable of respondents on privacy and security. Based on Table 4.4, descriptive analysis on independent variable of privacy and security which overall mean on a 5-point Likert scale and standard deviation for all items under privacy and security were between 3.62 and 3.99. The scores of standard deviations for the items indicate that the dispersion of data through the means does not vary too much and the views of the privacy and security statement of the actual respondents do not vary too much between each other, and the average reflects the data well.

Table 4.4

Descriptive analysis on independent variable of privacy and security

	N	Mean	Std. Deviation
I feel confident making payments through E-Wallet services.	400	3.97	.977
I believe the E-Wallet services have a potential to be safer than traditional payment options such as credit cards and cash.	400	3.98	1.002
I believe technology used in E-Wallet is secure.	400	3.90	.981
I believe E-Wallet system can be trusted.	400	3.99	1.017
I believe the chances of losing money stored in E-Wallet apps are low.	400	3.62	1.155
I trust transactions made via E-Wallet services.	400	3.96	.888
I trust the business providers of E-Wallet services will not divulge any of my information to the third party.	400	3.62	1.195
I believe E-Wallet services keep customers' interests best in mind	400	3.84	1.070
I believe E-Wallet services keep their promises and commitments.	400	3.83	1.042
I believe E-Wallet service providers follow consumer laws.	400	3.87	1.042
Valid N (listwise)	400		

Normality Analysis

The test of normality was examined using the skewness and kurtosis methods. The data are assumed to be normally distributed if both the skewness and kurtosis score values lie between -4 and +4. Skewness and kurtosis values are obtained for the scale variables perceived usefulness, social agents, and privacy and security. All the factors expecting behavioral intention to use E-Wallet were observed to be perfectly normally distributed with both skewness and kurtosis scores falling within the recommended range of -4 and +4. The behavioral intention to use E-Wallet slightly of normality assumption with kurtosis value (1.448) falling inside the recommended range -4 to +4. The normality test for independent variables for perceived usefulness, social agents and privacy and security also shows that the normality assumption with (1.301), (-0.156) and (0.591) respectively. According to Field (2013), to identify distribution scores of data collected normality test is used. The details can be assumed to be naturally distributed with regard to the skewness and kurtosis of the value at zero. However, it is almost difficult to have a value of zero for skewness and kurtosis, hence the data can be assumed to be naturally distributed if the skewness and kurtosis values are between -4 to +4 (Tabachnick & Fidell, 2013).

Table 4.5

Result of skewness and kurtosis

	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Behavioral Intention of E-Wallet adoption	400	-1.000	.122	1.448	.243
Perceived Usefulness	400	-.911	.122	1.301	.243
Social Agent	400	-.490	.122	-.156	.243
Privacy and Security	400	-.893	.122	.591	.243
Valid N (listwise)	400				

Reliability Analysis

Reliability test is performed to measure internal consistency of the responses on the questionnaire which normally assists in validating if the statements in the questionnaire measure the same attributes or not. A Cronbach's Alpha score between 0.70 and 0.90 indicates that the scale is reliable. The reliability test was performed on dependent variable behavioral intention to use E-Wallet and independent variables perceived usefulness, social agent, and privacy and security. All the measured variables were observed to have high Cronbach's Alpha as shown in Table 4.6.

Due to high Cronbach's Alpha, all the variables' items are selected. According to Sekaran and Bougie (2016), a good range and acceptable range for research are 0.70 to 0.80. The Cronbach Alpha of the variables for this research values are in a good range when they are greater than 0.70.

Table 4.6

Result of Cronbach's alpha

Variable Item	N of Items	Cronbach's Alpha
Behavioral Intention of E- Wallet adoption	10	.893
Perceived Usefulness	10	.849
Social Agent	10	.897
Privacy and Security	10	.943

Pearson Correlation Analysis

Correlation test is usually performed to examine association between two variables. The analysis aimed at evaluating the relationship between the dependent variable and the various independent variables – perceived usefulness, social agent, privacy and security. Based on Table 4.7, there is a significant relationship between behavioral intention of E-Wallet adoption and perceived usefulness ($r = 0.569$, $p < 0.05$), social agent ($r = 0.437$, $p < 0.05$), privacy and security ($r = 0.571$, $p < 0.05$).

Table 4.7
 Result of Pearson correlation analysis

		Perceived Usefulness	Social Agent	Privacy and Security	Behavioral Intention of E-Wallet adoption
Perceived Usefulness	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	400			
Social Agent	Pearson Correlation	.290**	1		
	Sig. (2-tailed)	.000			
	N	400	400		
Privacy and Security	Pearson Correlation	.472**	.632**	1	
	Sig. (2-tailed)	.000	.000		
	N	400	400	400	
Behavioral Intention of E-Wallet adoption	Pearson Correlation	.569**	.437**	.571**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	400	400	400	400

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

Coefficient of Correlation

The coefficient of determination, R square, is the proportion of the total variation in the dependent variable that was explained by the variation in the independent variables. The R square value for this study is 0.452 indicated 45.2% of the variance in all independent variables (Perceived Usefulness, Social Agent, Privacy and Security) explained the dependent variable (Behavioral Intention to Use E-Wallet). Another 54.8% is explained by other variables.

Table 4.8
 Model summary (dependent variable: Behavioral intention of E-Wallet adoption)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.672a	0.452	0.448	0.47514
a. Predictors: (Constant), Privacy and Security, Perceived Usefulness, Social Agent				
b. Dependent Variable: Behavioral Intention of E-Wallet adoption				

Multiple Linear Regression

Multiple Linear Regression is a statistical technique for establishing a relationship that involves independent variable and a dependent variable. It examined the percentage of independent variables that explain the dependent variable (Kumari & Yadav, 2018).

Table 4.9
 Result of analysis of the variance

ANOVAa						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	73.638	3	24.546	108.728	0.000b
	Residual	89.400	396	0.226		
	Total	163.038	399			
a. Dependent Variable: Behavioral Intention of E-Wallet adoption						
b. Predictors: (Constant), Privacy and Security, Perceived Usefulness, Social Agent						

Referring to table 4.9, a significant regression equation was found, $F(3, 396) = 108.728$ and $p\text{-value} = 0.000$ indicated that there was at least one independent variable that significantly influences the dependent variable.

Table 4.10
 Coefficient table of regression analysis (Behavioral intention of E-Wallet adoption)

Coefficient						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.353	0.170		7.976	0.000
	Perceived Usefulness	0.391	0.043	0.386	9.149	0.000
	Social Agent	0.096	0.035	0.131	2.732	0.007
	Privacy and Security	0.232	0.039	0.306	5.868	0.000
a. Dependent Variable: Behavioral Intention of E-Wallet adoption						

Referring to table 4.10, all independent variables (perceived usefulness, social agent, privacy and security) are significant towards behavioral Intention to Use E-Wallet since p-value 0.05. According to the beta value, perceived usefulness has the largest beta coefficient ($=0.386$, p-value $=0.000<0.05$), explaining 38.6 percent of the variation in behavioral intention to use E-Wallet. Social Agent ($=0.131$, p-value $=0.007>0.05$) contributes 13.1 percent to behavioral intention to use an electronic wallet. Privacy and security have the second-largest beta coefficient ($=0.306$, p-value $=0.000<0.05$), explaining 30.6 percent of the variation in behavioral intention to use an E-Wallet.

The Final Regression Equation

Behavioral Intention = $1.353 + 0.391$ Perceived Usefulness + 0.096 Social Agent + 0.232 Privacy and Security

Discussion

H1: There is significant relationship between perceived usefulness and behavioral intention of E-Wallet adoption among Malaysian young adults

The results for H1 shows the correlation coefficient (r) was 0.569 and the significant value of $p=.00$ is less than 0.05 level of significance, there is statistically significant association between perceived usefulness and behavioral intention of E-Wallet adoption among Malaysian young adults, thus the H1 hypothesis is accepted.

Perceived usefulness is defined as "the degree to which a user believes that using a particular technology would improve his or her job performance (Alswaigh, 2021). Several studies have found that perceived usefulness positively influences user acceptance to adopt E-Wallet (Alswaigh, 2021). This research found the relationship between perceived usefulness and user behavioral intention to use E-Wallet service.

H2: There is significant relationship between social agent and behavioral intention of E-Wallet adoption among Malaysian young adults

The finding for H2, which is connected to the social agent variable, indicates that social agents and behavioral intention to use an E-Wallet among Malaysian young adults are significantly and positive relationship. The H2 is acceptable since this variable shows a correlation coefficient (r) of 0.437 and a p-value of 0.00 , which is less than the 0.05 level of significance. As a result, the Malaysian young adults' social agent and behavioral intention of E-Wallet adoption is statistically significant.

The social agent has a significant indirect impact on the initiation of adoption (Yang et al., 2012). The adoption of an electronic wallet was significantly influenced by friends, coworkers, and others, according to the conclusion (Yang et al., 2012). The percentage of E-Wallet adoption will rise if consumers' relatives or friends believe they should use one (Lwoga & Lwoga, 2017). According to Junadi and Sfenrianto (2015), social influence and norms have a beneficial impact on consumers' intentions to use E-Wallet systems. The marketing department can use powerful people whose opinions are valued to promote the E-Wallet services because the social agent is a significant factor. Through social media, they can also advertise their services (Slade et al., 2015).

H3: There is significant relationship between privacy and security and behavioral intention of E-Wallet adoption among Malaysian young adults

According to the H3 finding, which is based on privacy and security, there is a positive and significant relationship between privacy and security and behavioral intention to use an E-Wallet and among Malaysian young adults. The H3 is accepted based on the finding of H3, which shows that the correlation coefficient (r) was 0.571 and the significant value of $p=0.00$ is less than .05 level of significance. Thus, among Malaysian young adults, there is a statistically significant and favorable association between privacy and security and behavioral intention of E-Wallet adoption.

According to Batra and Kalra (2016), security was a positive significant factor in the adoption of E-Wallets, suggesting that as security improves, so will interest in using them. This suggests that security is a key element driving the adoption of E-Wallets. Most respondents said that security and privacy were crucial issues to consider while making an online purchase (Yong et al., 2018).

Conclusion

This study intended to investigate the factors affecting young adults in Malaysia who use E-Wallets. A conceptual model was created using the TAM models. By analyzing the effects of several behavioral characteristics on the user's behavioral intention to embrace E-Wallet services, this study added to the body of research on the adoption of E-Wallets. As a conclusion, this research has identified the elements that influence young adults' adoption of E-Wallet services in Malaysia. The findings demonstrate a positive association between the independent variables of perceived usefulness, social agent, privacy and security and the behavioral intention to use an E-Wallet. A total of 400 surveys that were sent online at random via links have been gathered. SPSS was used to examine every piece of information gathered through questionnaires. The data were analyzed using multiple regression analysis, descriptive analysis, reliability analysis, normality analysis, Pearson correlation coefficient analysis, and coefficient of correlation (R) analysis.

This research discovered a substantial association between behavioral intention to use an E-Wallet among Malaysian young adults and perceived usefulness, social agent, privacy and security. Facility providers and business owners can use the findings of this research as a starting point for providing more effective services. Additionally, current business owners should focus on factors that will enhance E-Wallet services while aspiring entrepreneurs what customers expectation from E-Wallets. Therefore, they will be able to improve their capacity to compete in the market. Future studies can draw from this research and utilize it as a guide for their own future research.

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References

- Alswaigh, N. Y. (2021). Factors Affecting User Adoption of E-Payment Services Available in Mobile Wallets in Saudi Arabia. *IJCSNS International Journal of Computer Science and Network Security*, 21(6), 222
- Aydin, G., & Burnaz, S. (2016). Adoption of mobile payment systems: A study on mobile wallets. *Journal of Business, Economics and Finance*, 5(1), 73-92.
- Batra, R., & Kalra, N. (2016). Are digital wallets the new currency?. *Journal of Management and Technology*, 11(1), 29-30.
- Barry, M., & Jan, M. T. (2018). Factors Influencing the Use of MCommerce: An Extended Technology Acceptance Model Perspective. *International Journal of Economics, Management and Accounting*, 26(1), 157-183.
- Blockchains. (2018). Growing use of digital wallets [Summary of studies by country]. Retrieved June 02, 2021, from <http://bcmio.io/blog/growing-use-of-digital-wallets-summary-of-studies-by-country/>
- Cliquet, G., Gonzalez, C., Hure, E., & Picot-Coupey, K. (2015). From Mobile Phone to Smartphone: What's New About M-Shopping? Ideas in Marketing: *Finding the New and Polishing the Old* (pp. 199-202). Springer, Cham.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340.
- Shin, D. H. (2009). Towards and understanding of the consumer acceptance of mobile wallet, *Computers in Human Behavior*, 25(6), 1343-1354.
- Digital Wallet. (2019). Retrieved from Wikipedia: https://en.wikipedia.org/wiki/Digital_wallet
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.
- Ganeshwaran, K. (2019). CEO: Time for e-wallet environment to consolidate. The Star. <https://www.thestar.com.my/business/business-news/2019/06/19/ceo-time-for-ewallet-environment-to-consolidate>.
- Gokilavani, R., Kumar, D. V., Durgarani, M., & Mahalakshmi, R. (2018). Can India Move Towards Digital Sovereign Currency? A Study on Perception of Consumers Towards. *International Journal of Pure and Applied Mathematics*, 119(17), 2167-2175.
- Hu, P. J., Chau, P. Y. K., Sheng, O. L. R., & Tam, K. Y. (1999). Examining the technology acceptance model using physician acceptance of telemedicine technology. *Journal of Management Information Systems*, 16(2), 91-112.
- Junadi, & Sfenrianto. (2015). A model of factors influencing consumer's intention to use E-payment system in Indonesia. *Procedia Computer Science*, 59, 214-220.
- Kabir, M. A., Saidin, S. Z., & Ahmi, A. (2017). Analysis of factors that influence electronic payment adoption. *Journal of Engineering and Applied Science*, 12(3).
- Karim, M. W., Haque, A., Ulfy, M. A. and Hossain, M. A. and Anis, M. Z. (2020) *Factors influencing the use of e-wallet as a payment method among Malaysian young adults*. *Journal of International Business and Management*, 3 (2), 1-12.
- Kaur, H. (2020). Forget 'social distancing'. The WHO prefers we call it 'physical distancing' because social connections are more important than ever. CNN. Retrieved October 10, 2020.
- Khatimah, H., Susanto, P., & Abdullah, N. L. (2019). Hedonic Motivation and Social Influence on Behavioral Intention of E-Money: The Role of Payment Habit as A Mediator. *International Journal of Entrepreneurship*, 23(1), 1-9.
- Krejcie, R. V., & Morgan, D. W. (1970). *Determining Sample Size for Research Activities*. *Educational and Psychological Measurement*, 30, 607-610.

- Krisna, M. (2017). Product adoption life cycle for Mobile wallets in India. Noteworthy - *The Journal Blog*.
- Kumar, A., & Lim, H. (2008). Age Differences in Mobile Service Perceptions: Comparison of Generation Y and Baby Boomers. *Journal of Services Marketing*, 22(7), 568-577. <https://doi.org/10.1108/08876040810909695>
- Kumari, K., & Yadav, S. (2018). Linear Regression Analysis Study. *Journal of The Practice of Cardiovascular Sciences*, 4(1), 33.
- Kwateng, K. O., Atiemo, K. A. O., & Appiah, C. (2019). Acceptance and use of mobile banking: an application of UTAUT2. *Journal of enterprise information management*, 32(1), 118-151.
- Laywilla, E., Kartar Singh, J. S., & Yin Fah, B. C. (2020). Drivers of Intention to Adopt Mobile Wallet: A Quantitative Study Among Females in Jakarta. *International Journal of Academic Research in Business and Social Sciences*, 10(11).
- Leng, G., & Lada, S. (2011). An Exploration of Social Networking Sites (SNS) Adoption in Malaysia Using Technology Acceptance Model (TAM), Theory of Planned Behaviour (TPB) And Intrinsic Motivation. *Journal of Internet Banking & Commerce*, 16(2), 1-27.
- Lwoga, E. T., & Lwoga, N. B. (2017). User acceptance of mobile payment: The effects of user-centric security, system characteristics and gender. *The Electric Journal of Information Systems in Developing Countries*, 81(3), 1-24.
- Madan, K., & Yadav, R. (2016). Behavioral Intention to Adopt Mobile Wallet: A Developing Country Perspective. *Journal of Indian Business Research*, 8(3), 227-244.
- Mastor, H. (2021). Factors that Affect the Usage of E-wallet Among Youth: A Study at a Public Institution of Higher Learning in South Sarawak. *Advanced International Journal of Business, Entrepreneurship and SMEs*, 3(7), 40-48.
- Megadewandanu, S., Suyoto, & Pranowo. (2017). Exploring mobile wallet adoption in Indonesia using UTAUT2: An approach from consumer perspective. *Proceedings - 2016 2nd International Conference on Science and Technology-Computer*, ICST 2016, 11-16. <https://doi.org/10.1109/ICSTC.2016.7877340>
- Milberg, S. J., Smith, H. J., & Bruke, S. J. (2000). Information privacy: Corporate management and national regulation. *Organization science*, 11(1), 35-57.
- Nizam, F., Hwang, H. J., & Valaei, N. (2018). Measuring the Effectiveness of E-Wallet in Malaysia. 3rd IEEE/ACIS *International Conference on Big Data, Cloud Computing, and Data Science Engineering* (pp. 59-69). Springer, Cham.
- Our Statista Research Department. (2020). Smartphones - Statistics & Facts. Retrieved from Statista: <https://www.statista.com/topics/840/smartphones/>
- Prabhakaran, S., Vasantha, D. S., & Sarika, P. (2020). Effect of social influence on intention to use mobile wallet with the mediating effect of promotional benefits. *Journal of Xi'an University of Architecture & Technology*, 12, 3003-3019.
- Raimee, N., Maheswaran, L., Santhini Appannan, J., & Radzi, N. M. (2021). Adoption of Digital Wallet: Influencing Factors among Undergraduates in Malaysia, *International Journal of Business and Technology Management*, 3(2).
- Rathore, H. S. (2016). Adoption of digital wallet by consumers. *Journal of Management Research*, 8(1), 69-75.
- Ray, A. (2017). What are the different types of e-commerce payment systems? Retrieved on May 25, 2018.
- Schwartz, W. (2019). Descriptive Psychology and the Person Concept: Essential Attributes of Persons and Behavior. *Academic Press*.

- Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach*. (5th ed.). New York: John Wiley & Sons, Inc.
- Slade, E., Williams, M. D., Dwivedi, Y., & Piercy, N. (2015). Exploring consumer adoption of proximity mobile payments. *Journal of Strategic Marketing*, 23(3), 209-223.
- Sudeep, S. (2007). *Internet banking and customer acceptance: The Indian scenario*, PhD thesis, Cochin University of Science and Technology.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Boston: Pearson.
- Teng, S., & Khong, K. W. (2021). Examining actual consumer usage of E-wallet: A case study of big data analytics. *Computers in Human Behavior*, 121.
- Teo, S. C., Law, P. L., & Koo, A. C. (2020). Factors Affecting Adoption Of E- Wallets Among Youths In Malaysia. *Journal of Information System and Technology Management*, 5(19), 39-50. <https://doi.org/10.35631/jistm.519004>
- Uddin, M. S., & Akhi, A. Y. (2014). E-wallet system for Bangladesh an electronic payment system. *International Journal of Modeling and Optimization*, 4(3), 216-226.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.
- Wulantika, L., & Zein, S. R. (2020). E-Wallet Effects on Community Behavior. *IOP Conference Series: Materials Science and Engineering*, 879(1). <https://doi.org/10.1088/1757-899X/879/1/012121>
- Yang, S. Q., Lu, Y. B., Gupta, S., Cao, Y. Z., & Zhang, R. (2012). Mobile payment services adoption across time: An empirical study of the effects of behavioural beliefs, social influences, and personal traits. *Computers in Human Behavior*, 28(1), 129-142.
- Yaokumah, W., Kumah, P., & Okai, E. A. (2017). Demographic influences on e-payment services. *Journal of E-Business Research*, 13(1), 44-65.
- Yeh, M. L., & Tseng, Y. L. (2017). *The College Students' Behavior Intention of Using Mobile Payments in Taiwan: An Exploratory Research*. Singapore, Semantic Scholar Org.
- Yennie, T. (2018). Banking on the e-wallet in Malaysia. PwC Malaysia. <https://www.pwc.com/my/en/perspective/deal-strategy/181003-banking-on-the-e-wallet-in-malaysia.html>
- Yi, M., and Hwang, Y. (2003). Systems: self-efficacy, enjoyment, learning goal orientation and the technology acceptance model, *International Journal of Human-Computer Studies*, 59, 431-449.
- Yong, C., Kong, X., Lee, Y., Lim Sin, V. A., Ong, Y. I., Ping, C., Tunku, U., & Rahman, A. (2018). Moving into Cashless Society: Factors Affecting Adoption of E-wallet.
- Zhao, W., & Othman, M. N. (2010). Predicting and Explaining Complaint Intention and Behavior of Malaysian Consumers: *An Application of the Planned Behavior Theory*. *Advances in International Marketing*, 9(1), 229-2