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Abstract

The development of e-wallet technology is seen as an added value to the society's lifestyle today. However, each user will make a choice and show a different response to a new technology whether to accept or reject it. Therefore, this research was conducted to study the factors affecting e-wallet technology acceptance among users in Kuala Lumpur and the relationship as well as the influence between the two variables. The data was obtained through the distribution of the questionnaires, which were analysed using descriptive and inference analysis via mean and correlation. The results of this study found that the level of attitude, perceptions of behavior control, awareness and acceptance of e-wallet dimensions are high. However, the dimensions of subjective norm and needs are average. Therefore, future studies could look into this dimension on the behaviour of smartphone users to continue using e-wallets. In addition, the study can also use qualitative methods or mix modes to obtain close feedback from the respondents.

Keywords: Development, e-Wallet, Technology, Society, Lifestyle

Introduction

The development of technology today is seen as an important phenomenon that has had a major impact on the daily lives of people worldwide. This is because everything that happens in human society is always changing through the development and change of technology (Abd Rahman et al., 2017). This matter is also driven by the sophistication of Information and Communication Technology (ICT) which has made a country and society more advanced in the era of globalization (Jorgenson & Vu, 2016).

The use of ICT is seen to be very widespread involving administration, national development, economy, education and so on (Misdi et al., 2009). According to Rogers (1993), ICT is a tool used by an individual to interact with other individuals and use it for the purpose of creating something. While Musa (2002) stated that ICT helps speed up a process and activity more efficiently and reduce errors. This situation has indirectly improved the standard of living of the world population to become better (Holmes, 2005).

According to Don (2018), the world is developing more and more from time to time until the human role is taken over by various new technologies. Therefore, the five leading countries in the world that are most prominent in leading AI technology are the United States, China, Japan, Germany and India (Sharma, 2019). The technological progress of these countries also depends a lot on electronic devices built for the purpose of communication systems (Norazlan, 2020). Therefore, the community no longer needs to interact face-to-face but instead deal with it only at the fingertips through computers or smartphones (Sharma, 2019).

This information boom era also saw IR 4.0 become a catalyst for the development and spread of innovation that moves faster (Charles, 2000). This also open up space for the entry of new business models in addition to being transformed through applications on smartphones, thus changing the economic structure of the modern world (Rose, 2016). As such, the financial industry is seen as one of the affected industries and has experienced significant changes compared to the previous situation (Ikeda, 2018). This is because previously payment transactions could be done in cash using physical money, i.e. paper and coins. However, it can now be done without cash or cashless using electronic money or e-money (Singh & Ahmad, 2019).

Among the types of e-wallets offered in the market today are Grab, MEA, Foodpanda, Lalamove, Boost, TNG eWallet and so on (Singh & Ahmad, 2019). According to Ikeda (2018), the diversity of payment methods introduced by players in the financial industry can expand the number of users and merchants thus impacting the financial field. Therefore, optional payment through e-wallet is seen to be able to provide new facilities for users to use the technology and further improve financial affairs (Ahmad, 2019).

With the speed of ICT nowadays, Malaysia is no less great in implementing the introduction of the e-wallet payment system as a new facility for users (Mahathir Mohamad, 2019). Various ICT sophistication and development are implemented to influence and change the minds of users to switch to e-wallet technology. Therefore, this study is very important to help and be a reference for all parties to understand the behavior of the community in Malaysia towards the acceptance of e-wallet technology. This is so that it can meet the current needs of users and increase their confidence in e-wallet technology.

E-wallet technology can be welcomed if users, especially those who use smart phones, can easily access ICT. This can be seen through BNM's second quarter bulletin report in 2018 which reports that the penetration rate of smartphone use is seen to be increasing in Malaysia. The same report also revealed that the number of mobile banking accounts has increased from 1.6 million in 2011 to 11.5 million accounts in 2017 (Mandeep Singh & Shabana Naseer Ahmad, 2019). In addition, financial transactions through mobile banking have also increased to over 91 percent within seven years. It recorded a total of 106.1 million transactions worth RM48.3 billion compared to 2.2 million transactions with a total value of RM0.9 billion in 2011 (Wei & Tsu, 2018). Therefore, this is considered to be the best opportunity to use a smartphone as an intermediary to make and receive e-wallet payments without additional infrastructure costs (Wei & Tsu, 2018).

Overall, the development of e-wallet technology is seen to be able to add value to the way people live today. This is because e-wallet can increase productivity and stimulate an individual's economic resources (Nor Azmi Ahmad, Kamal Ab. Halim & Zakirah Othman, 2014). However, each individual will make a choice and show a different response to a new technology whether to accept or reject it (Straub, 2009). Therefore, the e-wallet technology that is introduced should be easy and fast to obtain and convey to others (Destiana et al., 2013).

Use of E-Wallet Technology in Malaysia

Overall, the development of e-wallet technology is seen to be able to add value to the way people live today. This is because e-wallet can increase productivity and stimulate an individual's economic resources (Ahmad et al., 2014). However, each individual will make a choice and show a different response to a new technology whether to accept or reject it (Straub, 2009). Therefore, the e-wallet technology that is introduced should be easy and fast to obtain and convey to others (Destiana et al., 2013).

According to Singh & Ahmad (2019), e-wallet is a new payment medium that is easy and can be used especially in financial matters. This is because the community has started making various types of e-wallet payments through smartphones (Rathore, 2016). Among the uses of this e-wallet is to pay bills, order food, transport services and so on (Salodkar et al., 2015). In addition, there are many e-wallet applications offered to users for different purposes (Salodkar et al., 2015).

The 3G, 4G and 5G technology provided by telecommunication companies also proved to help the use of e-wallets faster (Shukla, 2016). This is because users only need to make payments by accessing the internet (Shukla, 2016). According to Chauhan (2013), e-wallet users can make payments with various internet access including smartphone data, broadband facilities (wifi) in homes or public places. In addition, e-wallet also has the feature of connecting to a bank account through the user's credit or debit card number and it is easy to add value (Rathore, 2016). Therefore, the e-wallet payment method is believed to be easier and safer for the public to use (Chauhan, 2013).

According to the Head of the Malaysian Statistics Department, Dato' Mahidin (2020), there are various age groups of users identified as using e-wallets. This is because 45.1 percent of individuals aged 25 to 29 prefer to order goods and services online. In addition, individuals aged between 35 and 39 years are more active in using services related to travel or accommodation (32.6%). However, the use of e-wallet is limited to users under the age of 21. This is because e-wallet top-up requires the monitoring of parents who have access to bank accounts to make money transfers to children's e-wallet accounts (Chong, 2019). For that reason as well, the average e-wallet user account balance is between RM10 and RM50 (Milo, 2018).

The use of e-wallets in Malaysia is seen to have increased in recent years (Iprice, 2019). This is because e-wallet technology receives continuous support from the government as well as active marketing by various companies involved (Iprice, 2019). Therefore, the e-wallet technology that is introduced should be easy and fast to obtain and can be conveyed to others (Destiana et al., 2013). Therefore, many individuals will be able to make a choice and show different reactions to this e-wallet whether to accept or reject it (Straub, 2009).

Theory of Planned Behaviour

The Theory of Planned Behavior (TPB) is the result of the development of TRA by Ajzen, 1985. According to Rouibah & Ramayah (2009), TRA is a model that is often widely used in the field of social psychology. This is because TRA is used to gain a deeper understanding of the factors that influence human behavior (Ajzen & Fishbein, 1980). In addition, TRA also explains the individual's belief in himself and his environment (Isa, 2016).

However, Ajzen (1985) argues that human behavior is more often influenced by external factors rather than being fully controlled by individual intentions. Therefore, Ajzen (1985) has added another variable which is the perception of behavioral control (perceived behavioral control) as shown in Figure 1.

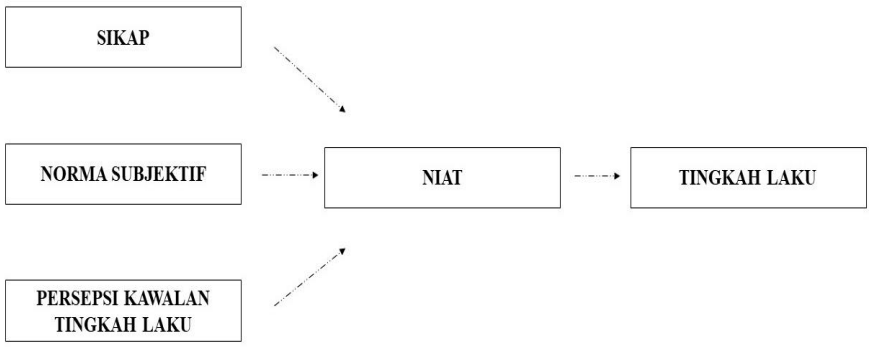

Figure 1: Teori Tingkah Laku Terancang (*Theory of Planned Behaviour*)
Source: Ajzen (1985)

According to Zhang (2018), attitudes can be divided into either being positive or negative. This is because attitudes influence behavior by making an assessment of something (Cob et al., 2017). Therefore, if an individual is fond of what is done, then the tendency of that person towards that behavior is higher (Othman et al., 2014).

Subjective norms measure the extent to which an individual responds to other individuals (Ajzen & Fishbein, 1975). In addition, subjective norms are also influenced by normative beliefs in society (Zhang, 2018). This is because it is closely related to an individual's belief in the behavior of others which is considered as a motivation for him to act (Zhang, 2018). Therefore, the individual involved will hope that the normative can be seen the same in himself (Othman et al., 2014).

The perception of behavioral control refers to an individual's response to something or a behavior that they want to do whether it is easy or difficult (Othman et al., 2014). According to Othman (2017_, the perception of behavioral control also refers to the perception of past experiences and expected obstacles. Therefore, it can be concluded that if an individual's attitude is more positive and the greater the potential of social norms that he sees, then it is easier for a perception of behavioral control to be implemented (Zhang, 2018). As a result, it will give rise to the intention to tend to perform behavior on something (Ajzen, 1985).

According to Nair (2008), technology will only be accepted if it makes it easy and safe for people to use the technology no matter where they are. Therefore, the researcher also added two independent variables namely Awareness and Need to see the relationship and influence in the dimension of attitude towards the acceptance of e-wallet technology. According to

Maslow (1943), humans have various basic needs. This is because when people can meet basic needs then it will motivate an individual to achieve satisfaction within themselves.
Need refer to things that give people pleasure, convenience and space (Yusuf al-Qaradawi, 1993). This means that without the use of a product or service, it does not threaten human safety but still causes difficulties in human life (Al-Qaradawi, 1993). Therefore, the needs also affect the behavior of each individual that changes according to the importance of technology that affects them before it is fully accepted in everyday life (Chern et al., 2018).
According to Ibrahim & Ali (2013), awareness refers to intuition without thinking and understanding about something. In addition, awareness is also related to an individual's level of sensitivity to the surrounding conditions in addition to having an interest in something (Mohd Koharuddin Mohd Balwi, 2004). Therefore, awareness involves various factors that are taken into account including individual factors, environment, supervision and training programs for the introduction to something new (Abidin, 1997).

Methodology

In this study, the method used by the researcher is a quantitative method. This is because the quantitative design is suitable for descriptive studies to obtain data in bulk and focus on the objectives of the study (Robson, 2011). According to Yilmaz (2013), the quantitative approach can be analyzed through numerical and statistical data involving a broader perspective to understand human problems and social phenomena. In addition, quantitative methods can also measure variables in research (Jasmi, 2014). This is because it involves research objectives and questions expressed through theory and in the form of hypotheses (Borrego et al., 2009).

In this study, the researcher used a survey method through a survey form. This is because the survey method is the most effective way to collect information from a sample of individuals selected from the population being studied (Neuman, 2003). According to Babbie (2004), survey methods through questionnaires are often used in studies where the unit of analysis is the human individual. In addition, the survey method also provides space and opportunity for respondents to think and answer comfortably (Neuman, 2003). Therefore, the survey method of the survey form is suitable for this study to obtain data and answers from the respondents.

Therefore, the sample of this study will only involve respondents consisting of smartphone users aged 15 and above randomly to obtain better data. A total of 418 respondents were selected in accordance with the total sample size suggested by (Krejcie & Morgan, 1970). This is because the total population in Kuala Lumpur has reached almost two million people and that number only represents the total population around the capital (Dahlan, 2019).

For the study location, KL Golden Triangle was chosen because it is the main commercial center for the Capital of Malaysia according to (Yusoff, 2017). This is because the retail market in the city center is dominated by retail sales centers located in tourist destinations (Yusoff, 2017). Among the locations that have been identified are Suria KLCC and Pavilion KL as well as retail shops along the streets of the Bukit Bintang area.

Findings

The first objective of this study is to analyse the mean factors that influence the acceptance of e-wallet technology among users in Kuala Lumpur. Therefore, the mean value for each dimension can be referred to as in Table 2.0.

Table 2.0
Mean Value for Factors Affecting the Acceptance of E-Wallet Technology Among Consumers in Kuala Lumpur

Dimension	*Mean	Standard Deviation
Attitude	5.20	1.13666
Subjective Norms	4.51	1.21719
Perception of behavioral control	5.50	1.05767
Awareness	5.65	1.05625
Need	4.55	1.38858
Acceptance of e-wallet technology	5.59	1.07989

N=418
*(Likert Scale: 1=Strongly disagree, 7=Strongly agree)

Based on Table 2.0, the attitude dimension in the independent variable of factors that affect users is at a high level (mean=5.20, standard deviation=1.13666). However, the dimension of subjective norms is at a moderate level (mean=4.51, standard deviation=1.21719). The third dimension, which is the perception of behavioral control, is at a high level (mean=5.50, standard deviation=1.05767). In addition, the fourth dimension which is awareness is also at a high level (mean=5.65, standard deviation=1.05625). The fifth and last dimension in the independent variable of smartphone user behavior, which is the need, is at a moderate level (mean=4.55, standard deviation=1.38858).

In addition, the dependent variable which is the acceptance of e-wallet technology is seen to be at a high level (mean=5.59, standard deviation=1.07989). Overall, it can be seen that the three dimensions of factors that affect users, namely attitude, perception of behavioral control and awareness are at a high level. In addition, the dimension of the dependent variable which is the acceptance of e-wallet technology is also at a high level. However, only the dimensions of subjective norms and needs are at a moderate level. Overall, the dimension of awareness is seen as an important factor influencing the acceptance of e-wallet technology among users in Kuala Lumpur. This may be due to extensive promotions in the areas visited by users.

The second objective of this study is to evaluate the relationship between attitudes, subjective norms, perceived behavioral control, awareness and needs of smartphone users with the adoption of e-wallet technology in Kuala Lumpur. The relationship between attitudes and the acceptance of e-wallet technology in Kuala Lumpur can be seen as in Table 2.1.

Table 2.1
Correlation Coefficient between Attitude and Acceptance of E-Wallet Technology in Kuala Lumpur

Variables	Acceptance of E-Wallet Technology
Attitude	0.766 (*r*)
Sig. (2-tailed)	0.000

Based on Table 2.1, it can generally be seen that there is a relationship between attitude and the acceptance of e-wallet technology in Kuala Lumpur where the correlation value is (r=0.766) with a confidence or significance level of less than 0.05 (p<0.05). This shows that

there is a strong and positive relationship between the two variables. This means that the attitude dimension has a strong relationship to influence the acceptance of e-wallet technology among users in Kuala Lumpur.

Table 2.2
Correlation Coefficient between Subjective norms and E-Wallet Technology Acceptance in Kuala Lumpur

Variables	**Acceptance of E-Wallet Technology**
Subjective norms	0.518 (*r*)
Sig. (2-tailed)	0.000

Table 2.2 shows the relationship between subjective norms and the acceptance of e-wallet technology in Kuala Lumpur. In general, it can be seen that there is a correlation between subjective norms and the acceptance of e-wallet technology in Kuala Lumpur where the correlation value is (r=0.518) with a confidence or significance level of less than 0.05 (p<0.05). This shows that there is a simple and positive relationship between the two variables. This means that the dimension of subjective norms has a moderate relationship to influence the acceptance of e-wallet technology among users in Kuala Lumpur.

Table 2.3
Correlation Coefficient between Behavior Control Perception and E-Wallet Technology Acceptance in Kuala Lumpur

Variables	**Acceptance of E-Wallet Technology**
Perception of Behavioural Control	0.800 (*r*)
Sig. (2-tailed)	0.000

Table 2.3 shows the relationship between the perception of behavioral control and the acceptance of e-wallet technology in Kuala Lumpur. In general, it can be seen that there is a correlation between the perception of behavioral control and the acceptance of e-wallet technology in Kuala Lumpur where the correlation value is (r=0.800) with a confidence or significance level of less than 0.05 (p<0.05). This shows that there is a strong and positive relationship between the two variables. This means that the perceived dimension of behavioral control has a strong relationship to influence the acceptance of e-wallet technology among users in Kuala Lumpur.

Table 2.4
Correlation Coefficient between Awareness and Acceptance of E-Wallet Technology in Kuala Lumpur

Variables	**Acceptance of E-Wallet Technology**
Awareness	0.837 (*r*)
Sig. (2-tailed)	0.000

Table 2.4 shows the relationship between awareness and acceptance of e-wallet technology in Kuala Lumpur. In general, it can be seen that there is a correlation between awareness and the acceptance of e-wallet technology in Kuala Lumpur where the correlation value is (r=0.837) with a confidence or significance level of less than 0.05 (p<0.05). This shows that there is a strong and positive relationship between the two variables. This means that

the dimension of awareness has a strong relationship to influence the acceptance of e-wallet technology among users in Kuala Lumpur.

Table 2.5
Correlation Coefficient between Needs and Acceptance of E-Wallet Technology in Kuala Lumpur

Variables	**Acceptance of E-Wallet Technology**
Needs	0.704 (*r*)
Sig. (2-tailed)	0.000

Table 2.5 shows the relationship between the need and the acceptance of e-wallet technology in Kuala Lumpur. In general, it can be seen that there is a relationship between the need and the acceptance of e-wallet technology in Kuala Lumpur where the correlation value is (r=0.704) with a confidence or significance level of less than 0.05 (p<0.05). This shows that there is a strong and positive relationship between the two variables. This means that the need dimension has a strong relationship to influence the acceptance of e-wallet technology among users in Kuala Lumpur.

Overall, the Pearson's correlation statistical analysis on the study data shows that there is a relationship between the two variables. Therefore, hypothesis I which says that there is a significant relationship between Attitude, Subjective Norms, Behavioral Control Perception, Awareness and Needs with the acceptance of e-wallet technology in Kuala Lumpur is accepted.

Conclusion

In addition, this study can also be a reference and guide for e-wallet facilities providers, financial institutions and also researchers who want to do more research related to this topic in the future.

The theoretical implications of this study are in terms of the addition of two other independent variables used in this study, namely awareness and needs. This is because the research findings have implications for the theory of planned behavior which involves three existing dimensions, namely attitude, subjective norms and perception of behavioral control. These two new independent variables are seen to be important factors to the attitude dimension in the acceptance of e-wallet technology. This is because the results of the study on the dimensions of awareness and needs show very positive results. In addition, the dimension of awareness obtains a high value while the dimension of need is at a moderate level. Furthermore, these two dimensions also have a significant relationship and influence on the acceptance of e-wallet technology.

This study is also expected to give implications to the industry, especially the providers of e-wallet facilities and services to develop this technology in the future. In addition, banking and financial institutions can also practice e-wallet feedback submitted by users. This is because the information included in this study can provide guidelines on user behavior as well as important steps that need to be taken to increase the acceptance of e-wallets among users.

In addition, industry players can also intensify the promotion of the advantages of e-wallet to the general public to increase awareness among users. This is because many e-wallet users are still completely dependent on cash. Therefore, the rapid development of e-wallet technology in Malaysia is seen to be able to have a great impact on society if it is implemented

correctly and effectively. This is to ensure the continuity of the e-wallet service as well as improve the position of the business in the local market.

Finally, this study can also contribute to general knowledge related to the behavior of a user in making a decision to accept or reject a new technology introduced. This is because e-wallets have different interests for each individual (Taylor, 2017). Therefore, user behavior towards the use of e-wallet is seen to change from time to time (Laleh et al., 2016). However, it may turn into a necessity in daily life if it really brings benefits to users (Laleh et al., 2016).

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