Contents lists available at GrowingScience

# International Journal of Data and Network Science

homepage: www.GrowingScience.com/ijds

# Integration of technology acceptance model and theory of reasoned action in predicting e-wallet continuous usage intentions

Putu Laksmita Dewi Rahmayanti<sup>a</sup>, I Gusti Ngurah Jaya Agung Widagda<sup>b</sup>, Ni Nyoman Kerti Yasa<sup>b\*</sup>, I Gusti Ayu Ketut Giantari<sup>b</sup>, Martaleni<sup>c</sup>, Dwi Putra Buana Sakti<sup>d</sup>, Suwitho<sup>e</sup> and Putri Anggreni<sup>f</sup>

fFaculty of Economics and Business, Mahaendradatta University, Bali, Indonesia

#### CHRONICLE

#### ABSTRACT

Article history:
Received: March 12, 2021
Received in revised format: June 24, 2021
Accepted: July 29, 2021
Available online: August 2, 2021

Keywords: Continuous Usage Intention Attitude Perceived Usefulness Perceived Ease of Use E-Wallet The purpose of this study is to determine the factors influencing continuous usage intention of E-Wallet in Denpasar City with integrating the Technology Acceptance Model (TAM) And Theory of Reasoned Action (TRA). This study applied a structural equation model analysis with 140 samples collected from E-Wallet users in Denpasar City. The results show that all three determinants of E-Wallet continuous usage intention, including perceived usefulness, perceived ease of use, and attitude. Recommendations are provided for E-Wallet providers to improve their user continuous usage intention in Denpasar City.

© 2021 by the authors; licensee Growing Science, Canada.

# 1. Introduction

The physical distancing policy due to the COVID-19 pandemic has significantly affected the economic life of the community. Novel coronavirus or SARS-Cov2 can be easily transmitted if droplets from an infected individual land on an inanimate object and are then touched by another individual (Ather et al., 2020; Barry & Jan, 2018). Cash payments can mediate the virus when it is touched by an infected person. Therefore, it is best to use digital money whenever possible. Prior to this outbreak, non-cash payments via smartphones had already gained popularity in several developing countries such as Thailand, Vietnam, and Indonesia. E-wallet is a type of e-money where money is stored on a server, not on a chip card (Aji et al., 2020). In Indonesia, there are several server-based e-wallet providers such as Go-Pay, OVO, LinkAja, DANA. However, the use of this e-wallet has not been implemented optimally in Indonesia. Limitations on the use of non-cash transactions are the culture or habits of people who keep cash, especially those in rural or remote areas. Denpasar is the city with the highest population density in the province of Bali. Urbanization drives migration rates and increases economic activity, including the use of e-wallet. Users do not fully understand the benefits of e-wallet and the extent to which they are used efficiently. The distribution of non-cash usage and transactions has not yet reached all businesses. Transactions were found to be limited to Micro, Small & Medium Enterprises or at merchants who collaborated with electronic money issuers. They transact with consumers and suppliers of \*Corresponding author.

E-mail address: kertiyasa@unud.ac.id (N. N. K. Yasa)

© 2021 by the authors; licensee Growing Science, Canada. doi: 10.5267/j.ijdns.2021.8.002

<sup>&</sup>lt;sup>a</sup>Faculty of Economics, Business and Tourism, Hindu Indonesia University, Bali, Indonesia

<sup>&</sup>lt;sup>b</sup>Faculty of Economics and Business, Udayana University, Bali, Indonesia

<sup>&</sup>lt;sup>c</sup>Faculty of Economics and Business, Gajayana University, Malang, Indonesia

<sup>&</sup>lt;sup>d</sup>Faculty of Economics and Business, Mataram University, Lombok, Indonesia

<sup>&</sup>lt;sup>e</sup>STIESIA, Surabaya, Indonesia

interconnected electronic money users. It is necessary to increase the intention to use e-wallet continuously to improve and maintain the performance of e-wallet provider companies. The use of digital transactions is determined by the user's intention, where the behavioral intention itself is determined by the attitude towards the behavior and perceived usefulness (Davis et al., 1989). The theory of reasoned action (TRA) which explicitly states that individual behavior is influenced by their intentions. Those intentions are in turn shaped by each attitude toward behavior. TRA suggests that the decision-making process for individuals involves beliefs, attitudes, intentions, and behaviors. The theoretical basis of TRA is that individuals will act on their beliefs by going through the stages of attitude. Attitudes are positive and negative feelings that consumers get towards a technology (Schierz et al., 2010). Based on Allport's theory (1935) attitude is an intellectual and neutral state of reading which is built on the individual's knowledge of technology which directly affects the individual's response when individuals adopt technology. When an individual adopts a certain behavior, the trust gained because of adapting that behavior is called consumer attitude (Ajzen & Fishbein, 1980). Based on the theory of reasoned action, a better goal to adopt a particular product is obtained when a person acquires a more positive attitude towards the behavior. TRA also states that individual behavior is largely motivated by attitudes. In previous studies a significant relationship has been obtained between attitudes towards a particular technology and the intention to use the technology (Yeo et al., 2017; Amoroso et al., 2018).

The decision to use a new technology is determined by the perceived usefulness and the perceived ease of use, which is believed to be the basis for determining the technology acceptance model (TAM) (Davis et al., 1989). Mobile-based payment systems are widely used for transactions and payments are made using mobile applications because consumers find this method useful (Gokilavani et al., 2018). Therefore, perceived usefulness is associated with behavioral intentions. Shaw (2014) is of the view that perceived usefulness significantly influences the intention to use e-wallet. The findings explain that the promise to deliver the desired results leads individuals to use the system. In terms of mobile payments, the respondents mentioned that transactions can be done quickly by them because cellphones are easily available in their hands. There are many studies using perceived usefulness as a variable and most of the findings indicate perceived usefulness has a positive impact on technology acceptance. This suggests that perceived usefulness plays an important role in determining the acceptance of the technology which will lead to better outcomes for future studies. Therefore, it is important for this study to investigate the perceived usefulness of the e-wallet context. One of the factors considered in using an e-wallet is the ease with which users feel when using an e-wallet. In the theory of acceptance model, this is referred to as perceived ease of use. It is shown that payments made using e-wallet are more convenient and faster than conventional banking systems because they save time and money (Blockchains, 2018). The term perceived ease of use signifies "the degree to which using a particular system will be effort-free" (Davis et al., 1989). Behavioral intention to use technology is positively and significantly influenced by perceived ease of use (Lee et al., 2017; Agrebi & Jallais, 2015). A study by Indarsin and Ali (2017), revealed that perceived ease of use and behavioral intention to continue to use were positively and significantly related. Similarly, behavioral intentions to use information systems are predicted by perceived ease of use (Perkasa & Rustam, 2016). The study of Raza et al. (2017) found a positive and significant effect of perceived ease of use on perceived usefulness and perceived use of use on behavioral intentions to use a particular system. Al-Maroof and Al-Emran (2018) conducted research on students who considered that using web service technology was easy and user-friendly so that it had a positive effect on perceptions of usefulness and behavioral intentions. The main objective of this study is to determine the factors impacting on continuous usage intention of E-Wallet.

# 2. Theoretical framework and hypotheses

## 2.1 Perceived usefulness

Perceived usefulness is described as a person's tendency to use an application and believe that this perception will help him do a better job (Indarsin & Ali, 2017). According to Davis (1989), perceived usefulness is a degree of the use of certain technologies that will improve the user's work performance. According to Adamson and Shine (as quoted in Perkasa & Rustam, 2016), perceived usefulness is defined as what builds a person's belief that the use of certain technologies will improve performance. Perceived usefulness can be defined as an individual's belief that an increase in his job performance can be achieved by using a particular system and that it will provide him with new features that secure and facilitate performance (Malik & Annuar, 2019). It can be concluded that perceived usefulness is closely related to system productivity and the overall effectiveness of its use to improve the performance of system users (Perkasa & Rustam, 2016). Perceived usefulness can be determined as how well consumers believe a product can be integrated into their daily routine and improve their personal efficiency, such as being more productive and organized (Deghani, 2018). It was found that perceived usefulness has a strong influence on a person's intentions and attitudes towards the use of a system or behavior (Raza et al., 2017). Research conducted by Indarsin and Ali (2017), Raza et al. (2017), and Ifinedo (2018) state that perceived usefulness has a positive and significant effect on attitudes. In terms of perceived usefulness, if the use of an e-wallet is considered useful for users, they will use the e-wallet. On the other hand, if users feel that the e-wallet system does not benefit them, they will hesitate to use the e-wallet (Routray et al., 2019). Hamid et al. (2016), Perkasa & Rustam (2016), Arfat et al. (2018), and Routray et al. (2019) found that perceived usefulness has a positive and significant effect on continued use of a system. However, research conducted by Muchran and Ahmar (2015) states that perceived usefulness has no significant effect on the intention to continue using banking technology.

H1: Perceived usefulness has a positive and significant effect on continuous usage intention.

H<sub>2</sub>: Perceived usefulness has a positive and significant effect on attitude.

#### 2.2 Perceived ease of use

Perceived ease of use (PEOU) can be defined as the degree to which potential users expect the target system to be free from relevant efforts in computer usage behavior (Davis, 1989). In other words, according to Kim et al. (2009) a system that is easy to use, and has an easy and simple interface, should be a system that is also useful for people in their work. PEOU can also be described as people's perception of the use of technology without mental stress and people do not need to allocate a lot of their time and energy when using technology (Hamid et al., 2016). Research conducted by Deghani et al. (2018) regarding the case of smart watches, perceived ease of use can be described as how consumers find it easy to learn and use smart watches in the way of new interaction techniques such as voice recognition or ultrasonic gesture recognition. Perceived ease of use is defined as "the degree to which a person believes that using technology will be effort-free" (Hamid et al. 2016). Sometimes potential users believe that an innovation can help them do a better job. However, sometimes they doubt that it is not easy to use. Perceived ease of use is described as a person's level of belief that the use of technology will reduce excessive effort (Indarsin and Ali, 2017). PEOU affects the individual's perspective on the use of technology (Raza et al., 2017). While the research of Indarsin and Ali (2017), and Raza et al. (2017) found that PEOU had a positive and significant effect on attitudes. Perkasa & Rustam (2016), Hamid et al. (2016), Indarsin and Ali (2017), Raza et al. (2017) found that perceived ease of use had a significant effect on continuous usage intention. Contrary to this research, Muchran and Ahmar (2015) stated that perceived ease of use had no significant effect on continued use intentions.

H3: Perceived ease of use has a positive and significant effect on continuous usage intention.

H<sub>4</sub>: Perceived ease of use has a positive and significant effect on attitude.

#### 2.3 Attitude

According to Kim et al. (2009) an attitude affects individual behavior by filtering information and shaping individual perceptions of the world. In addition, they state that users who strongly support the use of a particular technology may adopt and continue to use that technology; but users who have weakly supportive attitudes toward technology use can easily be persuaded to change their preferred attitude, prevent adoption or continue using the technology. Laihad (2013) found that attitudes towards behavior did not affect the use of technology, but on the contrary, Sondakh (2017) proved that attitudes showed a significant influence on technology adoption. In addition, research conducted by Weng et al. (2018) and Indarsin and Ali (2017) state that attitudes towards use are influenced by perceptions of ease of use and perceptions of usefulness. Research conducted by Yeo et al. (2017) and Amoroso et al. (2018) states that attitude has a significant effect on intention to continue using technology. Attitude indicators according to research according to Weng et al. (2018), among others, good responses, favorable, positive influence, feel valuable, and as a trend. Attitude indicators according to research according to research according to Foroughi et al. (2019) that is considered a good idea, profitable, and a wise idea.

H<sub>5</sub>: Attitude has a positive and significant effect on continuous usage intention.

## 2.4 Continuous Usage Intention

A study by Lee and Kim (2020) stated that the purpose of continuous usage intention is defined as a customer's intention to continue using a product or service in the future. It is very important to attract existing customers through continuous use intentions, and attracting consumers is a very important factor in the company's performance and profits from a future perspective. Continuous usage intention is defined as the user's intention to continue using the product or service currently used (Deghani et al. 2018). Continuous usage intention is determined as the future customer's intention to continue using the product or service (Zhao and Diem, 2019). It is very important to attract existing customers through sustainable use intentions, and attracting consumers which is a very important factor in continuously creating company performance and profits from a future perspective. The intention to continue using the product is an opportunity for management to increase its users in using a product, where this depends on the theory of acceptance model (Hamid et al., 2016; Chang, 2005; Hussain et al., 2018). The main influence and the main mediating variable of the influence of other factors on the intention to use is a person's attitude in the direction of technology utilization (Raza et al., 2017; Dehghani et al., 2018). The use of technology is strongly influenced by the important role of attitude (Davis, 1989). Indicators to measure intention to continue use cited in Deghani et al. (2018) are as follows: (a) use in the future, (b) use regularly, and (3) increase the frequency of use.

#### 3. Research methodology

This study applied a structural equation model analysis with 140 samples collected from E-Wallet users in Denpasar. Quantitative research is the study that uses statistical methods to measure, reflect and explain the relationship between independent and dependent variables. The primary purpose of quantitative methods is to test the hypotheses of the research synthesized from theory (Thornhill et al., 2012). The questionnaire is provided to respondents via Google Form, and the link is sent to

social media such as WhatsApp, Instagram, and Facebook. One hundred and fifty samples were collected, but 10 samples were removed due to missing values. Structural equation model analysis is used for data analysis on SMART-PLS version 3.0. In terms of sampling size, Roscoe in Sugiyono (2018: 164) states that in research using multivariate analysis, the number of sample members considered representative is at least 5-10 times the number of indicators studied. This study uses 14 indicators so that the required sample is a minimum of  $70 (5 \times 14)$  and a maximum of  $140 (10 \times 14)$ . There are 14 questions in the questionnaire. However, this study collects 140 samples to ensure the representativeness of the sample.

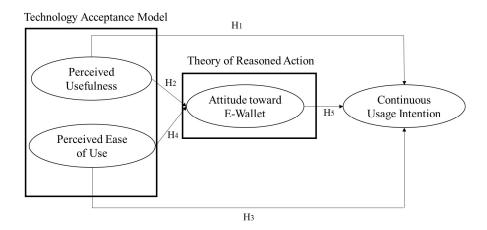


Fig. 1. The structure of the proposed study

The instruments used were tested for validity and reliability in order to measure what they wanted to measure and to know the consistency of the responses given by the respondents. Testing the validity of the instrument using the Product Moment correlation technique from Pearson with a minimum limit of r = 0.3 (Sugiyono, 2017: 150; Akmal, 2017). Instrument reliability testing is done by calculating the reliability coefficient of Cronbach's Alpha with a minimum limit of Alpha coefficient > 0.6 (Sekaran, 2003: 312). Both tests used the SPSS 24.0 computer program.

#### 4. Results and discussion

## 4.1 Measurement Model Test Results (Measurement Model)

The theoretical model that has been built in the conceptual framework is then drawn in a flowchart that serves to show the relationship between exogenous and endogenous variables to be tested. The measurement model or outer model is a specification of the relationship between latent variables and their indicators or also known as outer relations that define the characteristics of the construct and its manifest variables. In testing the outer model, three criteria are used, namely convergent validity, discriminant validity, and composite reliability.

**Table 1**Convergent Validity Test Results Using Outer Loading and AVE, as well as Composite Reliability Test Using Cronbach's Alpha

	Loading Factor	AVE	Cronbach's Alpha
Perceived Usefulness			0.927
X1.1	0.930		
X1.2	0.919	0.895	
X1.3	0.881		
_ X1.4	0.893		
Perceived Ease of Use			0.946
X2.1	0.932	0.862	
X2.2	0.942		
X2.3	0.946		
X2.4	0.891		
Attitude			
Y1.1	0.939		
Y1.2	0.935	0.821	0.929
Y1.3	0.934		
Continuous Usage Intention			
Y2.1	0.947		
Y2.2	0.943	0.876	0.941
Y2.3	0.947		

The first part is testing the outer model using convergent validity criteria. The value of convergent validity is the value of the loading factor on the latent variable with its indicators. Indicators in each dimension are considered valid if they have an outer loading value greater than 0.70. This test is done by comparing the average variance extracted (AVE) value of each latent variable. In this study, it is recommended that the AVE value should be greater than 0.50. Another outer model test, using composite reliability criteria, is to test the reliability value between the indicator blocks of the constructs that make it up. The indicator group has good composite reliability if it has a Cronbach's Alpha value greater than 0.70. The test results are presented in Table 1. Based on Table 1, all the values of the outer loading variables are greater than 0.50. Thus, it can be stated that the data in this study is valid, meaning that the reflective indicators with the latent variable scores have a good correlation. Based on Table 1, all AVE values are greater than 0.50. Thus, it can be stated that the data in the study is valid, meaning that the latent variable is able to explain more than half of the variance of the indicators in the average. Based on Table 1, all Cronbach's Alpha values in each variable are greater than 0.70. Thus, it can be stated that the data in the study is reliable. The second part is testing the outer model using discriminant validity criteria with cross loading. This test is done by checking the cross loading with latent variables. If the cross-loading value of each indicator on the relevant variable is the largest compared to the cross loading on other latent variables, then it is said to be valid. The indicator is considered valid if it has a cross loading value greater than 0.50. The results of the discriminant validity test using the loading factor are presented in Table 2 below. Based on Table 2, all cross-loading values of each indicator in each variable are greater than other latent variables. Thus, it can be stated that the data in the study is valid, meaning that the latent variable has become a good comparison for the research model.

 Table 2

 Discriminant Validity Test Results Using Cross Loading

	Continuous Usage Intention	Perceived Ease of Use	Perceived Usefulness	Attitude
X1.1	0.591	0.478	0.930	0.675
X1.2	0.674	0.495	0.919	0.678
X1.3	0.580	0.396	0.881	0.571
X1.4	0.547	0.424	0.893	0.625
X2.1	0.609	0.932	0.467	0.632
X2.2	0.650	0.942	0.499	0.727
X2.3	0.686	0.946	0.505	0.689
X2.4	0.591	0.891	0.365	0.624
Y1.1	0.668	0.664	0.652	0.939
Y1.2	0.691	0.652	0.643	0.935
Y1.3	0.752	0.707	0.684	0.934
Y2.1	0.947	0.692	0.611	0.712
Y2.2	0.943	0.645	0.625	0.704
Y2.3	0.947	0.605	0.644	0.721

## 4.2 The results of structural model

Testing of the structural model or inner model was conducted to see the relationship between the constructs, the significance value, and the R-square of the research model. Goodness of fit model was measured using R-square for endogenous latent variables. The R-square on the structural model measures how well the observed values are generated by the model and the estimated parameters. The value of R-square has a value with a range of  $0 < R^2 < 1$ . The value of R2 which is getting closer to 1, indicates that the model is getting better (significant). If the test results on the inner model are significant, it can be interpreted that the indicators of each variable are seen as instruments for measuring the latent variables. The results of the R-square test are presented in Table 3.

**Table 3** R-square test results

	R Square	R Square Adjusted
Continuous Usage Intention	0.645	0.637
Attitude	0.680	0.676

Based on Table 3, the R-square value for the perceived usefulness and perceived ease of use variables on attitudes is 0.680. This shows that perceived usefulness and perceived ease of use have an influence of 0.680 (68.0%) on attitudes. The R-square (R²) value of 0.680 includes a fairly strong model, meaning that the perceived usefulness and perceived ease of use variables are able to explain the attitude variable of 68.0% and the remaining 32.0% is explained by other factors outside the model. The R-square value for the variables perceived usefulness, perceived ease of use, and attitudes towards the intention to continue using is 0.645. This shows that perceived usefulness, perceived ease of use, and attitudes have an influence of 0.645 (64.5%) on the intention to continue using. The R-square value (R²) of intention to continue to use is 0.645 including a strong model, meaning that the variables perceived usefulness, perceived ease of use, and attitude are able to explain the variable of intention to continue using by 64.5% and the remaining 35.5% is explained by other factors outside the model.

## 4.3 Hypothesis Testing Results

Hypothesis testing is used to measure the probability of a data using the path coefficients menu. The rule of thumb supports a research hypothesis if the coefficient or direction of the variable relationship indicated by the original sample value is in line with the hypothesis, and if the t-statistic value is > 1.645 (one tailed) or the t-statistic is > 1.960 (two tailed) or P-value <0.05 can be said to be significant. This means that there is a significant effect of one latent variable on the other latent variables. There are five hypotheses tested using Partial Least Square (PLS). This test is carried out using the t-test (t-test) on each path of influence between variables. In PLS statistical testing of each hypothesized relationship is carried out using the bootstrap method on the sample. Testing with bootstrap is also intended to minimize the problem of abnormal research data. The results of the direct influence test on the structural equation analysis are presented in Table 4 and Fig. 2.

**Table 4**Direct Effect Test Results

	Path Coefficient	P-Value
Perceived Usefulness → Continuous Usage Intention	0.268	0.029
Perceived Usefulness → Attitude	0.461	0.000
Perceived Ease of Use → Continuous Usage Intention	0.302	0.008
Perceived Ease of Use → Attitude	0.493	0.000
Attitude →Continuous Usage Intention	0.346	0.033

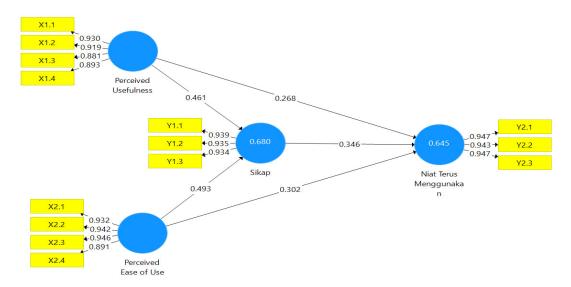


Fig. 2. The results of structural equation modeling

## 4.3 The Effect of Perceived Usefulness on Continuous Usage Intention

The results of the analysis show that perceived usefulness has a positive and significant effect on continuous usage intention. This means that the higher the perceived usefulness of e-wallet users in Denpasar City, the higher the intention to continue using e-wallet. Vice versa, the lower the perceived usefulness of e-wallet users in Denpasar City, the lower the intention to continue using e-wallet users in Denpasar City. These results indicate that the values contained in perceived usefulness have a significant impact on the intention to continue using e-wallet users in Denpasar City. Perceived usefulness as measured by indicators of making work faster, making work easier, useful, and increasing effectiveness has been proven to be able to influence the intention to continue using e-wallet users in Denpasar City. This finding can be interpreted that if e-wallet users in Denpasar City feel that the perceived usefulness is low, then it will be able to make a significant contribution in reducing the intention to continue using e-wallet users. The results of this study are in accordance with previous studies by Hamid et al. (2016), Perkasa & Rustam (2016), Arfat et al. (2018), and Routray et al. (2019) which states that perceived usefulness has a positive and significant effect on continued use of a system. In terms of perceived usefulness, if the use of an e-wallet is considered useful for users, they will use the e-wallet.

## 4.4 The Effect of Perceived Usefulness on Attitude

The results of the analysis show that perceived usefulness has a positive and significant effect on attitudes. This means that the higher the perceived usefulness of e-wallet users in Denpasar City, the better the attitude in using e-wallet will be. Vice versa, the lower the perceived usefulness of e-wallet users in Denpasar City, the worse the attitude in using e-wallet in

Denpasar City. These results indicate that the values contained in perceived usefulness have a significant impact on the attitudes of e-wallet users in Denpasar City. Perceived usefulness as measured by indicators of making work faster, making work easier, more useful, and increasing effectiveness has been proven to be able to influence the attitudes of e-wallet users in Denpasar City. This finding can be interpreted that if e-wallet users in Denpasar City feel that their perceived usefulness is low, then it will be able to make a significant contribution in making e-wallet users' attitudes worse. The results of this study are in accordance with previous studies by Indarsin and Ali (2017), Raza et al. (2017), and Ifinedo (2018) state that perceived usefulness has a positive and significant effect on attitudes. On the other hand, if users feel that the e-wallet system does not benefit them, they will hesitate to use the e-wallet (Routray et al., 2019). It was found that perceived usefulness has a strong influence on a person's attitude towards the use of a system or behavior (Raza et al., 2017).

# 4.5 The Influence of Perceived Ease of Use on Continuous Usage Intention

The results of the analysis show that perceived ease of use has a positive and significant effect on continuous usage intention. This means that the higher the perceived ease of use felt by e-wallet users in Denpasar City, the higher the intention to continue using e-wallet. Vice versa, the lower the perceived ease of use felt by e-wallet users in Denpasar City, the lower the intention to continue using e-wallet users in Denpasar City. These results indicate that the values contained in the perceived ease of use have a significant impact on the intention to continue using e-wallet users in Denpasar City. Perceived ease of use as measured by indicators of easy to learn, controllable, clear, and flexible has been proven to be able to influence the intention to continue using e-wallet users in Denpasar City feel that the perceived ease of use is low, then it will be able to make a significant contribution in reducing the intention to continue using e-wallet users. The results of this study are in accordance with previous studies by Perkasa & Rustam (2016), Hamid et al. (2016), Indarsin and Ali (2017), Raza et al. (2017) found that perceived ease of use had a significant impact on continued use intentions.

# 4.6 Influence of Perceived Ease of Use on Attitude

The results of the analysis show that perceived ease of use has a positive and significant effect on attitudes. This means that the higher the perceived ease of use felt by e-wallet users in Denpasar City, the better the attitude in using e-wallet will be. Vice versa, the lower the perceived ease of use felt by e-wallet users in Denpasar City, the attitudes in using e-wallet in Denpasar City are getting worse. These results indicate that the values contained in the perceived ease of use have a significant impact on the attitudes of e-wallet users in Denpasar City. Perceived ease of use which is measured based on indicators that are easy to learn, controlled, clear, and flexible has been proven to be able to influence the attitudes of e-wallet users in Denpasar City. This finding can be interpreted that if e-wallet users in Denpasar City feel that the perceived ease of use is low, then it will be able to make a significant contribution in making e-wallet users' attitudes worse. The results of this study are in accordance with previous research by Indarsin and Ali (2017) which states that perceived ease of use has a positive and significant effect on attitudes. This result is also supported by research by Raza et al. (2017) which mentions that perceived ease of use affects the individual's point of view on the use of technology.

## 4.7 Influence of Attitude on Continuous Usage Intention

The results of the analysis show that the attitude has a positive and significant effect on continuous usage intention. This means that the better the attitude felt by e-wallet users in Denpasar City, the higher the intention to continue using e-wallet. Vice versa, the worse the attitude felt by e-wallet users in Denpasar City, it will reduce the intention to continue using e-wallet users in Denpasar City. These results indicate that the values contained in attitudes have a significant impact on the intention to continue using e-wallet users in Denpasar City. Attitudes that are measured based on indicators of good, profitable, and wise ideas are proven to be able to influence the intention to continue using e-wallet users in Denpasar City. This finding can be interpreted that if e-wallet users in Denpasar City feel that they have a bad attitude towards e-wallet, then it will be able to make a significant contribution in reducing the intention to continue using e-wallet users. The results of this study are in accordance with previous research by Yeo et al. (2017) and Amoroso et al. (2018) states that attitude has a positive and significant effect on intention to continue using technology.

## 5. Research implications

# 5.1 Theoretical Implication

As has been stated in the analysis and discussion that this research can theoretically find a relationship between latent variables perceived usefulness, perceived ease of use, attitude, and continuous usage intention.

## 5.2 Practical Implications

This research can contribute ideas for the management of e-wallet companies. The thought contribution in question is that e-wallet companies always develop strategies to increase perceived usefulness and perceived ease of use in order to create a good attitude of innovation for their organization so as to increase users to continue using e-wallet.

#### 6. Conclusion

Based on the results of the research, discussion and interpretation that have been described in the previous chapter with reference to several theories and the results of previous studies, the following conclusions can be drawn.

- 1. Perceived usefulness has a positive and significant effect on the intention to continue using e-wallet in Denpasar City, meaning that the higher the perceived usefulness perceived by e-wallet users in Denpasar City, the higher the intention to continue using e-wallet.
- 2. Perceived usefulness has a positive and significant effect on attitudes, meaning that the higher the perceived usefulness of e-wallet users in Denpasar City, the better the user's attitude towards e-wallet.
- 3. Perceived ease of use has a positive and significant effect on the intention to continue using e-wallet in Denpasar City, meaning that the higher the perceived ease of use perceived by e-wallet users in Denpasar City, the higher the intention to continue using
- 4. Perceived ease of use has a positive and significant effect on attitudes, meaning that the higher the perceived ease of use perceived by e-wallet users in Denpasar City, the better the user's attitude towards e-wallet.
- 5. Attitude has a positive and significant effect on the intention to continue using e-wallet in Denpasar City, meaning that the better the user's attitude towards e-wallet, the higher the intention to continue using e-wallet.

#### 7. Suggestions

Based on the results of this study, several things can be suggested as follows. Advice for e-wallet management (1) Empirical evidence shows that perceived usefulness, perceived ease of use, and attitudes are able to make the intention to continue using e-wallet in Denpasar City become increasingly high, the management must always carry out strategies to increase perceived usefulness, perceived ease of use, and the attitude of e-wallet users so that the intention to continue using the e-wallet will be maintained and increased; (2) Empirical evidence shows that the increase in perceived usefulness and perceived ease can improve the attitudes of e-wallet users in Denpasar City, the management must always carry out strategies to increase the perceived usefulness and perceived ease of use of e-wallet users so that the attitudes of e-wallet users will wake up and get better. Suggestions for researchers (1) In future research, it is possible to expand research respondents not only to e-wallet users in Denpasar City, but also e-wallet users at the Bali province or national level; (2) The next researchers can conduct a study from a different perspective, namely from a consumer perspective and continue the impact of perceived usefulness and perceived ease of use on attitudes and intentions to continue using others.

## References

- Agrebi, S., & Jallais, J. (2015). Explain the intention to use smartphones for mobile shopping. *Journal of Retailing and Consumer Services*, 22, 16-23.
- Aji, H. M., Berakon, I., & Husin, M. M. (2020). COVID-19 and e-wallet usage intention: A multigroup analysis between Indonesia and Malaysia. *Cogent Business & Management*, 7(1), 1804181.
- Ajzen, I., & Fishbein, M. (1980). Understanding Attitudes and Predicting Social Behavior.
- Akmal, A. (2017). Influence of Perceived Usefulness and Ease of Use on Students' continuous Intention in Learning On-Line English Lessons: an Extended TAM. *In 4th UAD TEFL International Conference* (pp. 28-33).
- Allport, G. W. (1935). *Attitudes. In C. A. Murchinson* (Ed.), A Handbook of Social Psychology (Vol. 2, pp. 798-844). Worcester, MA: Clark University Press.
- Al-Maroof, R. S., & Al-Emran, M. (2018). Students acceptance of Google classroom: An exploratory study using PLS-SEM approach. *International Journal of Emerging Technologies in Learning*, 13(6), 112-123.
- Amoroso, D. L., Ackaradejruangsri, P., & Lim, R. A. (2018). The impact of inertia as mediator and antecedent on consumer loyalty and continuance intention. *In Mobile Commerce: Concepts, Methodologies, Tools, and Applications* (pp. 960-981). IGI Global.
- Arfat, Y., Rahman, C. A., Rahman, M., & Mahmood, K. (2018). Perceived usefulness of E-government and Computer self-efficacy to improve continuous intention to use E-Government Services. *Pakistan Business Review*, 20(1), 174-183.
- Ather, A., Patel, B., Ruparel, N. B., Diogenes, A., & Hargreaves, K. M. (2020). Coronavirus disease 19 (COVID-19): implications for clinical dental care. *Journal of endodontics*.
- 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, February 1). *Growing use of digital wallets* [Summary of studies by country]. Retrieved November 25, 2020, from http://bcmy.io/blog/growing-use-of-digital-walletssummary-of-studies-by-country/
- Chang, M. M. (2005). Applying self-regulated learning strategies in a web-based instruction—an investigation of motivation perception. *Computer Assisted Language Learning*, 18(3), 217-230.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35(8), 982-1003.
- Dehghani, M., Kim, K. J., & Dangelico, R. M. (2018). Will smartwatches last? Factors contributing to intention to keep using smart wearable technology. *Telematics and Informatics*, 35(2), 480-490.

- Foroughi, B., Iranmanesh, M., & Hyun, S. S. (2019). Understanding the determinants of mobile banking continuance usage intention. *Journal of Enterprise Information Management*.
- Gokilavani, R., Kumar, D. V., Durgarani, M., & Mahalakhsmi, 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.
- Hamid, A. A., Razak, F. Z. A., Bakar, A. A., & Abdullah, W. S. W. (2016). The effects of perceived usefulness and perceived ease of use on continuance intention to use e-government. *Procedia Economics and Finance*, 35, 644-649.
- Hussain, A., Mkpojiogu, E. O., & Yusof, M. M. (2016, August). Perceived usefulness, perceived ease of use, and perceived enjoyment as drivers for the user acceptance of interactive mobile maps. In AIP Conference Proceedings, 1761(1), p. 020051. AIP Publishing LLC.
- Ifinedo, P. (2018). Determinants of students' continuance intention to use blogs to learn: An empirical investigation. *Behaviour & Information Technology*, 37(4), 381-392.
- Indarsin, T., & Ali, H. (2017). Attitude toward Using m-Commerce: The Analysis of Perceived Usefulness Perceived Ease of Use, and Perceived Trust: Case Study in Ikens Wholesale Trade, Jakarta–Indonesia. Saudi Journal of Business and Management Studies, 2(11), 995-1007.
- Kim, Y. J., Chun, J. U., & Song, J. (2009). Investigating the role of attitude in technology acceptance from an attitude strength perspective. *International Journal of Information Management*, 29(1), 67-77.
- Laihad, R. C. (2013). Pengaruh Perilaku Wajib Pajak terhadap Penggunaan E-Filing Wajib Pajak di Kota Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi, 1*(3).
- Lee, S., & Kim, B. G. (2020). The Impact of Individual Motivations and Social Capital on the Continuous Usage Intention of Mobile Social Apps. *Sustainability*, 12(20), 8364.
- Lee, J. H., Wu, R., & Fan, L. (2017). Influence on the Use Intention of User's Traits in China Market. *The Journal of Business Economics and Environmental Studies*, 7(2), 21-29.
- Malik, A. N., & Annuar, S. N. S. (2019). The effect of perceived usefulness, perceived ease of use, trust and perceived risk toward E-wallet usage. *Insight Journal* (IJ), 183.
- Muchran, M., & Ahmar, A. S. (2019). Application of TAM model to the use of information technology. arXiv preprint arXiv:1901.11358.
- Perkasa, A. T., & Rustam, A. R. (2016). Pengaruh Persepsi Kebermanfaatan, Persepsi Kemudahan Penggunaan dan Persepsi Kepercayaan Wajib Pajak Terhadap Minat Menggunakan E-filing Sebagai Sarana Pelaporan Pelaporan Pajak (Study Kasus di PT Pelabuhan Indonesia III Cabang Benoa).
- Raza, S. A., Umer, A., & Shah, N. (2017). New determinants of ease of use and perceived usefulness for mobile banking adoption. *International Journal of Electronic Customer Relationship Management*, 11(1), 44-65.
- Routray, S., Khurana, R., Payal, R., & Gupta, R. (2019). A Move towards Cashless Economy: A Case of Continuous Usage of Mobile Wallets in India. *Theoretical Economics Letters*, 9(04), 1152.
- Schierz, P. G., Schilke, O., & Wirtz, B. W. (2010). Understanding consumer acceptance of mobile payment services: An empirical analysis. *Electronic Commerce Research and Applications*, 9(3), 209-216.
- Shaw, N. (2014). The mediating influence of trust in the adoption of the mobile wallet. *Journal of Retailing and Consumer Services*, 21(4), 449-459.
- Sondakh, J. J. (2017). Behavioral intention to use e-tax service system: an application of technology acceptance model. *European Research Studies Journal*, 20(2A), 48-64.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.
- Weng, F., Yang, R. J., Ho, H. J., & Su, H. M. (2018). A TAM-based study of the attitude towards use intention of multimedia among school teachers. *Applied System Innovation*, 1(3), 36.
- Yeo, V. C. S., Goh, S. K., & Rezaei, S. (2017). Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services. *Journal of Retailing and Consumer Services*, 35, 150-162.
- Zhao, J., & Diem, P. T. T. (2019). A Study on the Impact of Perceived Cosmetic Brand App Attributes on Customer Satisfaction and Continuous Usage Intention. *Journal of Asia Trade and Business*, 6, 75-89.



© 2021 by the authors; licensee Growing Science, Canada. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (http://creativecommons.org/licenses/by/4.0/).