

Determinants of the Use of E-Wallet for Transaction Payment among College Students

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ABSTRACT

This study aims to determine the factors that influence behavioral intentions to use E-wallet. The factors tested include application quality, perceived usefulness, perceived ease of use, and attitude toward using. The population in this study is college students in Jember Regency, Indonesia. Data analysis is carried out using Variance-based Partial Least Square. The number of samples used is 180 college students as users of the e-wallet application. Six hypotheses are tested, and four hypotheses are successfully accepted. Perceived ease of use has a positive effect on perceived usefulness. Perceived usefulness has a positive effect on attitude toward using e-wallet applications. Attitude plays a vital role in behavioral intentions to use e-wallets. The quality of the e-wallet application does not affect the level of perceived usefulness. The perceived ease of use of the application has no direct effect on attitude. This study's results are beneficial for e-wallet providers to increase the level of the use of e-wallet.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui faktor-faktor yang mempengaruhi niat perilaku penggunaan dompet elektronik (e-wallet). Faktor-faktor yang diuji meliputi kualitas aplikasi, manfaat yang dirasakan, kemudahan penggunaan, dan sikap terhadap penggunaan. Populasi sasaran dalam penelitian ini adalah mahasiswa di Kabupaten Jember, Indonesia. Analisis data dilakukan dengan menggunakan Partial Least Square berbasis variance. Sampel yang digunakan sejumlah 180 mahasiswa sebagai pengguna aplikasi dompet elektronik. Enam hipotesis diuji, dan empat hipotesis berhasil diterima. Kemudahan penggunaan berpengaruh positif terhadap manfaat yang dirasakan. Manfaat yang dirasakan berpengaruh positif terhadap sikap penggunaan aplikasi dompet elektronik. Sikap memainkan peran penting dalam keinginan untuk menggunakan dompet elektronik. Kualitas aplikasi dompet elektronik tidak berpengaruh terhadap tingkat kegunaan yang dirasakan. Kemudahan penggunaan aplikasi tidak secara langsung mempengaruhi sikap. Hasil penelitian ini berguna bagi penerbit dompet elektronik untuk meningkatkan tingkat penggunaan dompet elektronik.

1. INTRODUCTION

In the current era of globalization, human life is inseparable from the increasing use of technology amid global competition. The presence of the internet has impacted the acceleration of the flow of globalization and the spread of unlimited information throughout the world. Besides, technology has also experienced rapid development in all aspects of human life. The rapid development of technology has also created advances in the economic field, particularly in the use of e-wallets

for payment transactions.

Along with changing times and technological developments, cash transactions are no longer practical. This has led to an increase in the use of electronic money. The number of electronic money users continues to increase because the use of cash in transactions has many shortcomings. First, cash is less practical. Transactions using cash are inefficient because buyers have to carry cash to buy some of the items they want. Second, the seller sometimes has difficulty in giving change. The difficulty is mainly

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in the small value for money. Sellers sometimes neglect the buyer's right to get change. The change is sometimes replaced with goods that have the same price (Chen, 2018). Third, there are many counterfeit bills in circulation that are very similar to the originals, which can deceive ordinary people.

The benefits provided to consumers, both community and industry, trigger an increase in online payment transactions. The advantages of using online payments are the perceived ease of use (PEU), speed, and security for the wider community (Wasiaturrahma et al., 2019). The use of electronic money increases efficiency. For Bank Indonesia, the use of electronic money can save operational costs, especially in producing money, both banknotes, and coins. The use of non-cash payments can also prevent money from getting damaged or getting wet. Therefore, the need to replace new money is relatively low.

E-money is different from debit cards and credit cards. These cards are access products, not prepaid products. Debit cards or credit cards require multiple authentications to guarantee the deposit of money in a user's account. E-money or e-wallet is more practical than cash because users do not need authentication. The money used is the amount that the user previously stored in the e-money card. E-wallet users do not need to connect to the server, make a signature, and make a PIN. Besides, the price is lower because there is no need for communication costs, such as credit cards do (Nanggala, 2020). Physically, there are two types of an e-wallet: chip-based and digital application. Chip-based consists of BCA Flazz, BNI Tap Cash, BRI Brizzi, and Mandiri E-money. Digital e-wallet consists of Bank Mandiri E-cash, Dana, Link Aja, Go-Pay, and OVO (Hidranto, 2020).

Digital e-wallet is an online payment application installed on devices like IOS and android smartphones. The use of e-wallet services is increasingly growing along with the increasing public awareness and needs to conduct electronic-based transactions. Year to year, the use of e-wallet applications develop significantly. The development of e-wallets has influenced the increasing number of offline merchants who collaborate with e-wallets. Electronic wallets in Indonesia start with T-cash issued by Telkomsel. Bank Indonesia data reveals that in 2020 there are 38 e-wallets that have received official licenses. Bank Indonesia data show that during 2019 electronic money and digital wallet transactions reached 5.22 billion transactions, representing around IDR 145.16 trillion. The number increased compared to 2018, which reached 2.9

billion transactions, with a transaction value of around IDR 47.19 trillion. In January 2020, digital payments reached more than 457 million transactions with a transaction value of around IDR 15.87 trillion (Rizal, 2019).

It is interesting to examine the causes of the rapid growth of the use of e-wallet. One way to predict one's attitude in accepting and using technology is by using the Technological Acceptance Model (TAM). This model explains and predicts how users accept and use technology. TAM is a model designed to describe how users understand and apply information systems (Davis et al., 1989).

TAM shows that technology acceptance is influenced by attitude toward using (ATU). ATU itself is influenced by perceived ease of use (PEU) and perceived usefulness (PU). Several studies argue that PU is related to the relevance of application quality (AQ) used. According to Sakdiyah et al. (2019), application quality's relevance is closely related to the ability to be applied, the ability as a tool, the conformity to needs, and the degree of usefulness.

This study aims to determine the factors that influence the acceptance and use of e-wallets for transactions. Researchers focus on the acceptance and use of e-wallets using TAM-based variables. This study uses a previous research framework related to TAM, including payments using mobile banking (Leiva et al., 2017), electronic tickets (Amoroso & Magnier-Watanabe, 2012), and e-commerce (Gbongli, et al., 2019). Some of the variables tested are PU, PEU, ATU, and AQ (Pishchenko & Myriounis, 2016; Santika & Yadnya, 2017).

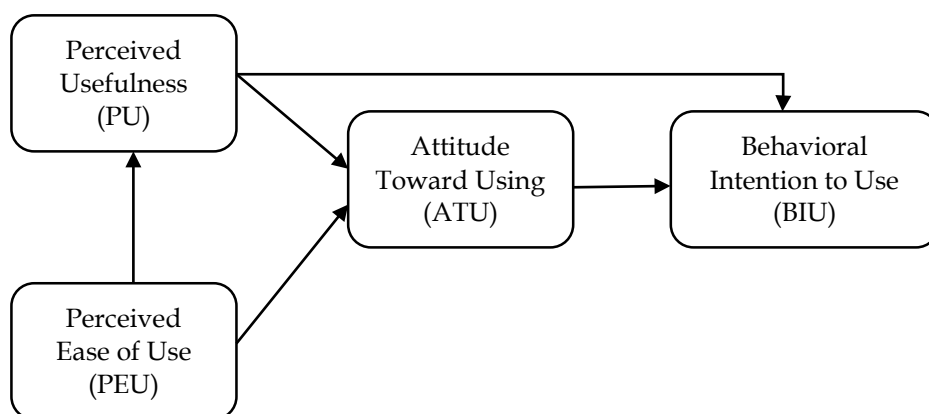
Previous studies show that there are variables that affect the acceptance of the use of internet-based technology. A review of the studies raises the conclusion that PEU, PU, and BIU influence the use of technology. The system quality variable is an antecedent variable that influences the use of e-wallet. The purpose of this study is to examine and analyze the effect of application quality (AQ) on perceived usefulness (PU), perceived ease of use (PEU) on perceived usefulness (PU) and attitudes towards using (ATU), perceived usefulness (PU) on attitudes towards using (ATU) and behavioral intentions to use (BIU), and attitudes towards use (ATU) on behavioral intentions to use e-wallets (BIU) for transaction payment among college students in Jember Regency.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

E-wallet is different from electronic money. Electronic money is a non-cash payment instrument issued based on the value of money deposited to the issuer first. To understand how e-wallet is used, it can be seen from the theory of consumer behavior. Consumer behavior is the behavior that consumers display in searching for, purchasing, using, evaluating, and disposing of products, services, and ideas (Galalae & Voicu, 2013). This theory states that all activities, actions, and psychological processes related to the decision-making process to obtain and use goods or financial services and the environment can influence the process. In other words, consumer behavior is the action taken by consumers to achieve and meet their needs, either to use, consume, and spend goods and services.

The actions or behavior begin when consumers are in need and desires. Consumers try to obtain the products they want and consume. In the end, the consumers have post-purchase actions, either satisfied or not satisfied. The process is influenced by ATU factors, beliefs, past experiences, and awareness to achieve goals and organize values.

Consumer behavior theory is complemented by an explanation given by the TAM theory. TAM explains the factors that influence the acceptance of the use of a technology product. Several factors are indicated to influence users' decisions about how and when they use new technology (Adhiputra, 2015; Alambaigi & Ahangari, 2016; Olushola & Abiola, 2017). TAM provides a basis for tracking the impact of external factors to achieve goals. Several cognitive determinants are indicated to influence the acceptance of the technology. The framework of TAM is as follows:



Source: Davis, Bagozzi, and Warshaw (1989)

Figure 1. Framework of TAM

The user's PEU and PU determine BIU. PU is defined as an individual's confidence that using technology is free from physical and mental effort. In other words, PU is a person's belief that his performance is increasing by using an application. In 2008, Venkatesh & Bala (2008) modified TAM by adding variables, such as adjustment and anchor groups, related to the PEU and usefulness variable (Lai, 2017). Besides, they also added the variable of quality of the system. The quality of the system is expected to affect PU.

Effect of Application Quality (AQ) on Perceived Usefulness (PU)

AQ affects PU. Quality is the characteristic of essential information about the system itself, while AQ is the output produced by the information system used. AQ refers to the information system

success model proposed by Delon & McLean (2003). AQ is the characteristic of the quality expected from the application of information systems along with the quality of product information. In this case, e-wallet application quality (AQ) is closely related to its system performance or user interface. The indicators of AQ are security, system availability, transaction processing speed, system reliability, adaptabilities, usability features, and information quality.

Good quality technology is related to how easy it is to understand and use. The higher the quality of the system, the higher the level of user satisfaction. The results of research conducted by Sakdiyah et al. (2019) and Yuwana & Kustono (2017) show that AQ affects PU. The results are in line with the results of studies conducted by Bach, Čeljo, & Zoroja (2016) and Ho, Ho, & Chung (2019), that AQ influences the

use of new technology. The higher the quality produced by the e-wallet provider, the greater the usefulness provided to users. Thus, there will be more useful information obtained by users. Finally, users will use the product more frequently.

H₁: Application quality (AQ) has a positive effect on perceived usefulness (PU) in using an e-wallet application

Effect of Perceived Ease of Use (PEU) on Perceived Usefulness (PU) and Attitude towards Using (ATU)

Previous studies state that the quality of accounting information systems affects perceived usefulness. According to Biswas (2016) and Aggorowati et al. (2012), the quality of information or system output affects technology acceptance. PEU in a transaction is a factor assumed influencing the repeated use of e-wallet application services. In this case, PEU is defined as PEU in transactions and PEU in using application service features. The more PEU in a transaction, the more often consumers use the application service. This is in line with the research results of Wang et al. (2005) and Liao et al. (2018), stating that if a person has additional features on his smartphone application, the person is increasingly using his smartphone. PEU in transactions using e-wallet applications is described as the simplicity of using the application. Application service users can easily transact using existing features (Kumar et al., 2017). PEU in transactions can be seen from how easy it is for consumers to use the services offered by e-wallet. PEU explains how users believe that using certain e-wallets is free from additional physical and mental effort (George, 2018). PEU covers installation, operation, and control. The more natural the technology used, the higher the usefulness expected from the technology associated with improved performance. PEU is related to the performance impact of using an e-wallet. Besides, PEU includes some characteristics, such as easy to learn, controllable, clear and understandable, flexible, and easy to become skillful. Behavioral intention to use (BIU) for the use and interaction between users and e-wallets can also demonstrate the user's PEU (Hutami & Septyarini, 2018; Wong & Mo, 2019).

Perceived Usefulness (PU) affects attitude toward using an e-wallet (ATU). If someone believes that e-wallet is easy to use, he will use it. However, if someone does not believe that e-wallet is easy to use, he will not use it. Several studies have shown that PU has a positive effect on ATU e-wallet.

H₂: Perceived ease of use (PEU) has a positive effect on perceived usefulness (PU) in using e-wallet application;

H₃: Perceived ease of use (PEU) has a positive effect on attitude toward using (ATU) in using e-wallet application.

Effect of Perceived Usefulness (PU) on Attitude toward Using (ATU) and Behavioral Intention to Use (BIU)

According to Davis et al. (1989), PU is a belief in efficacy. In this condition, users believe that using technology or application will improve their performance at work (Olushola & Abiola, 2017). PU is a belief about the decision making process. According to Lai (2017), previous studies conducted by Davis et al. (1989), Igbaria & Iivari (1995), and Leiva et al. (2017) show that PU constructs have a positive and significant influence on the use of e-wallet information. The results of previous studies have provided evidence of the effect of PU on BIU. PU drives the majority of BIU.

The e-wallet payment service system is deemed to provide much more usefulness than cash payments, such as paying a real nominal amount and quickness of payment to complete a transaction. The usefulness provided by e-wallet services includes assisting users in making transactions and transfers. Therefore, the higher the perception, the higher the interest in using e-wallet services.

PU has a direct effect on BIU beyond its influence through ATU. This indicates the possibility that perceived usefulness directly influences interest without being mediated by ATU. This statement is supported by the results of previous studies that PU has a positive effect on BIU. The results also show that PU can have a direct influence on BIU without going through ATU.

H₄: Perceived usefulness (PU) has a positive effect on attitude toward using (ATU) in using e-wallet application;

H₅: Perceived usefulness (PU) has a positive effect on behavioral intention to use (BIU) in using e-wallet applications.

Effect of Attitude towards Using (ATU) on Behavior Intention to Use (BIU)

ATU, which is identified as the cause of BIU, is a form of positive or negative beliefs in transacting using e-wallet constructed from ATU towards objects and behaviors (Harsanto & Jatnika, 2017;

Hussein, 2017). Individuals believe that they can do a behavior that will grow positive ATU, and vice versa. ATU reflects past experiences and anticipates existing obstacles.

BIU is a behavioral tendency to continue implementing technology (Liao et al., 2018). ATU has both a direct and indirect effect on user behavior. An interest in one's behavior mediates its indirect effect.

ATU provides motivational implications in the form of interest in individuals. The more positive one's ATU towards behavior and the higher the ATU, the stronger one's interest in indicating a behavior. Various service advantages provided by e-wallet applications can increase the user's ATU in using it so that the user will continue to use the

existing services.

Someone who understands the usefulness and PEU obtained by using e-wallet compared to the obstacles in its use is assumed to be interested in using the e-wallet. The higher the positive ATU the application and the fewer obstacles faced, the greater one's interest in certain behaviors. Based on the explanation above, the hypothesis can be formulated as follows:

H₆: Attitude toward using (ATU) has a positive effect on behavioral intention to use (BIU) in using e-wallet application;

The proposed research model is presented in Figure 2.

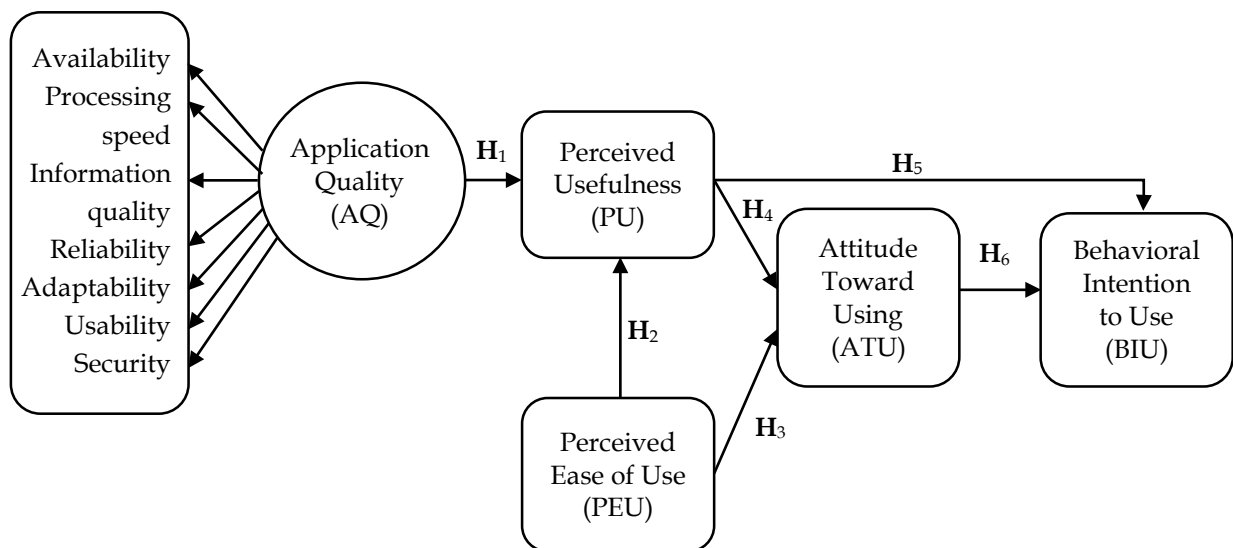


Figure 2. Framework for the Relationship between Variables

3. RESEARCH METHOD

Types of Research and Data Sources

The results of previous research conducted by Davis et al. (1989), Delone & McLean (2003), and Venkatesh & Bala (2008) show that there are variables that can underlie the mindset of using an e-wallet. The review of these studies raises the conclusion that there is a possible influence of AQ, expertise, PEU, PU, ATU, and BIU on the use of e-wallet (Priantama, 2018).

This study aims to examine the hypotheses. It is expected to measure the significance of the influence of the factors that affect the use of e-wallet. The approach used is a survey. The data used is subject or self-report data. Subject data is a type of research data in the form of opinion, ATU, experience, or characteristics of a person or group of people who become the subject of research (respondents).

The source of research data is the primary data source. Primary data are the research data obtained directly from respondents for the research objective. The data are collected through a survey method, specifically through a questionnaire distributed to respondents.

Data are collected using a questionnaire. The assessment of the quality of the questionnaire is conducted before being distributed. The pilot project involves 20 participants. The questionnaire is distributed to college students in Jember, who use the e-wallet application. Hypothesis testing is conducted using Variance-based Partial least squares with Smart-PLS software.

Population and Sample

The population is an overall element of a group with specific characteristics so that researchers can

generalize the results of their research. The population in this study is students of the faculties of economics and business in the Jember Regency.

The sample is a reflection of the population. The sampling technique used is multistage random sampling. The sample is chosen randomly by taking into account the following criteria: (1) the respondent is an active e-wallet user, and (2) the respondent is a college student in Jember.

Variable and Measurement

The dependent variable used in this study is BIU. Respondents are asked to perceive the BIU. In this instrument, respondents are asked to measure their perception of the success of e-wallet. The scale used is from 1 to 7: scale 1 - 2 shows low performance, scale 3 - 5 shows average performance, and scale 6 - 7 shows high performance. The independent variables used are PU, ATU, PEU, and AQ. These variables are measured using a questionnaire adapted from previous studies.

4. DATA ANALYSIS AND DISCUSSION

The total number of questionnaires distributed is 250 copies. The distribution is carried out by spreading

to students in universities, such as in Jember University (100 copies), Jember Muhammadiyah University (50 copies), IAIN Jember (50 copies), State Polytechnic Jember (25 copies), and STE Mandala (25 copies). The number of returned questionnaires that can be used is 180 copies. The response rate is around 72%.

Instrument Testing

The validity test that is declared valid can be known by looking at the t-value indicated by the loading factor of each indicator. The value is more than the critical value at a significance level of 0.05, and the probability value must be smaller than α (0.05).

Constructive validity testing is performed using product-moment correlation techniques. Theoretically, this technique shows the correlation of each statement with the total score. The r table value for $n = 100$ samples is 0.195, with a significance level of 5%. Statements that do not meet the value are not included in the study. From the test results, it can be seen that the whole questionnaire items used as a measure of constructs/variables meet the validity requirements. In other words, questionnaires are appropriate for measuring variables.

Table 1. Correlation Value

Construct	Correlation	
	Max.	Min
Security	0.9831	0.8490
Availability	0.9263	0.7980
Usability	0.7463	0.5210
Information Quality	0.8221	0.7804
Adaptability	0.9012	0.8619
Processing Speed	0.7567	0.7113
Reliability	0.7782	0.5623
PEU	0.9186	0.9016
ATU	0.8052	0.6247
PU	0.8040	0.6944
BIU	0.9053	0.8457

Source: secondary data processed, 2020

Reliability testing is done using internal consistency with Cronbach's alpha technique. The instrument is considered reliable if the alpha value is greater than 0.60 (Ghozali, 2011). The measure of Cronbach's Alpha is very susceptible to the number of items, which means that lower Cronbach's Alpha

can be accepted if the variable indicators have only a few items (e.g., two or three).

Table 2 shows that Cronbach's alpha scores for each variable/contract are above 0.60. Therefore, the instrument is considered to meet the reliability requirements.

Table 2. Reliability Testing

Construct	Cronbach Alpha
Security	0.8644
Availability	0.8406
Usability	0.6710
Information Quality	0.6606
Adaptability	0.7176
Processing Speed	0.8905
Reliability	0.7517
PEU	0.8984
PU	0.7874
ATU	0.8705
BIU	0.8545

Source: secondary data processed, 2020

There are 180 data collected after the observation. Data analysis is conducted using the assumption of causality so that the input variable used is the covariance between variables. The method used is

maximum likelihood. Hypothesis testing is done using structural equation modeling (SEM). The test results are shown in Table 3.

Table 3. Path Coefficients

Variable Relationship	Original sample	Sample mean	t-Statistic	P-Value
AQ→PU	0.671	0.665	1.437	0.151
PEU→PU	1.366	1.360	3.660	0.000
PEU→ATU	0.011	0.033	0.113	0.910
PU→ATU	0.956	0.934	10.765	0.000
PU→BIU	0.816	0.831	5.698	0.000
ATT→BIU	1.678	1.691	13.166	0.000

Source: secondary data processed, 2020

Table 3 shows P-value for each variable. It can be concluded that not all hypotheses regarding the causality relationship described in the model can be accepted. The first hypothesis (H1) states that AQ affects PU. Table 3 shows that AQ has an effect on PU at $p = 0.151$, which means that the first hypothesis is rejected. The second hypothesis (H2) states that PEU affects PU. Table 3 shows that PEU has an effect on PU at $p = 0.000$, which means that the second hypothesis is accepted. The third hypothesis (H3) states that PEU affects ATU. Table 3 shows that PEU has a positive effect on ATU at $p = 0.910$, which means that the third hypothesis is rejected. The fourth hypothesis (H4) states that PU affects ATU. Table 3 shows that PU has a positive effect on ATU at $p = 0.004$, which means that the fourth hypothesis is

accepted. The fifth hypothesis (H5) states that PU influences BIU. Table 3 shows that PU has a positive effect on BIU at $p = 0.000$, which means that the fifth hypothesis is accepted. The sixth hypothesis (H6) states that ATU affects BIU. Table 3 shows that ATU has an effect on BIU at $p = 0.000$, which means that the hypothesis is accepted.

Direct and Indirect Effect

The direct effect is the coefficients of all the coefficient lines with one end arrow. Indirect effects are effects that arise through an intermediate variable. PU (0.816) and ATU (1.678) have a direct effect on BIU, which means that when PU and ATU variables increase, the variable of BIU will also increase.

Table 4. Specific Indirect Effects

Variable Relationship	Original sample	T -Statistic
PEU→PU→ATU	1.307	3.237**
PU→ATT→BIU	1.605	8.328**
PEU→PU→ATU→BIU	2.193	3.211**
PEU→PU→BIU	1.115	3.281**

** significant at 0,01

The strength of the PU variable's effect on the BIU variable through the ATU variable is 1.605. The value is greater than the strength of the PU variable's direct effect on BIU (0.595). In other words, PU affects BIU through ATU.

Discussion

Four of the six hypotheses tested are accepted at a significance level of 0.05. It shows that the use of e-wallet needs to consider certain factors. The second hypothesis (H2) states that PEU affects PU. PEU explains that a person trusts e-wallet technology because he is free from physical and mental effort (Davis, 1989). An e-wallet application that is easy to operate makes it easy and gives usefulness to users. Then if the PEU of e-wallet application users is high, the perceived usefulness will also increase. These results support the results of previous research conducted by Amoroso & Magnier-Watanabe (2012), George (2018), Kumar et al. (2017), Lai (2017), Hutami & Septyarini (2018) that PEU has a positive and significant effect on the user's usefulness. This shows that the ease of making transactions using e-wallet applications increases users' effectiveness and productivity. In this case, the users do not need to carry cash to make transactions but only use e-wallet applications to provide usefulness to their users. As e-wallet application users, the background of respondents is a group of people who are ready to accept the application of technological innovation, such as mobile payment services. A right level of knowledge certainly makes it easy for users to learn and be proficient in using the application.

This study supports the fourth hypothesis, which states that PU affects the ATU e-wallet application. It means that the higher the PU, the higher the ATU e-wallet application. Respondents who believe they will get usefulness by using e-money will intend to use the e-wallet application. Respondents believe that using e-wallet applications in their daily activities would increase productivity, help performance becomes more efficient, and greatly assist in payment transaction activities. The results of this study are supported by the results of research conducted by

Davis et al. (1989), George (2018) Olushola & Abiola (2017); Wong & Mo (2019), and Yuwana & Kustono (2017) that PEU has a positive effect on ATU information technology.

The fifth hypothesis states that PU influences BIU. PU has a strong influence on BIU. Students who are quite proficient in using applications will feel confident and find it easy. Users can take advantage of the usefulness of the application.

The sixth hypothesis states that ATU affects BIU. The user's ATU plays an essential role in the successful use of e-wallet. The ATU level of e-wallet application service users affects the BIU e-wallet application.

In contrast to the initial assumption, it turns out that AQ does not affect the PU level. The first hypothesis which states that AQ affects PEU is rejected. In other words, changes in AQ do not affect PU. It is likely caused by the use of a single application or e-wallet application with a regular feature, and both are friendly for users. All e-wallet applications are developed with easy-to-use features. Respondents do not have different preferences for different e-wallet uses.

The third hypothesis, which states that the user's PEU affects the ATU e-wallet application is rejected. TAM explains that individuals' behavior to adopt certain parts of technology is determined by individual's attitude towards using (ATU) technology. The individual's ATU for the use of technology depends on how technology can help the individual or can facilitate the individual in making online transactions using an e-wallet.

Users focus more on the usefulness, not just PEU. In the e-wallet application, even though users find it easy to use as a transaction tool, it does not increase the ATU for e-wallet users. So it can be concluded that the user's PEU is not ATU stimulus to use e-wallet applications.

The empirical results of this study provide enlightenment for e-wallet providers. In general, the results of this study provide an understanding of entities planning to implement information systems. The main requirement is that application users must

have ease of use, benefits to improve performance, and effectiveness in transactions. The product must be designed so that the user is easy to use. E-wallets make it easy for business activities, save time, and make financial controls easier.

Ease of use is one of the critical factors in the successful implementation of a technology, which in turn will affect perceived usefulness and attitude to use. Even the perceived ease of use is an antecedent of perceived usefulness. If the perceived ease of use is high, the perceived usefulness will also be higher. When someone believes that the application is easy to use to help his needs, he will use it.

The application that is easy to learn brings more positive attitudes towards users to use this application. People will think that by using this application, their task will be quickly completed. Therefore, people who use an application will have a positive attitude towards using the application that will affect the acceptance of the application itself.

Applications that have clarity and are easy to understand will generally be more acceptable. This is because users know more about the primary purpose of the application and its benefits.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

This study aims to examine the factors that influence the use of e-wallet applications. The results show that four of the six hypotheses tested are accepted. This shows that the use of a new application needs to consider certain factors. ATU plays an essential role in the successful use of e-wallet applications. Level of ATU influences BIU. Likewise, PU has a positive effect on ATU. It means that the higher the PU, the higher the ATU e-wallet application. PEU influences PU. An e-wallet application that is easy to operate makes it easy and gives usefulness to users. Results show that PEU does not affect ATU. In the e-wallet application, even though users find it easy to use as a transaction tool, it does not increase the ATU for e-wallet users. AQ does not affect PU levels. In other words, changes in AQ do not affect PU. It is likely caused by the use of a single application or e-wallet application that has a regular feature.

This study provides evidence about the behavior of e-wallet users through TAM. An essential finding of this study is that perceived ease of use is a more critical factor than improving the quality of e-wallet applications. Standard features with ease of use are more useful to increase the use of e-wallet. This study's results can lead to further increase the effectiveness of the e-wallet development strategy by finding factors that affect

perceived ease of use.

The use of self-rating can be a threat to the reliability and validity of the score due to leniency bias. The use of more effective methods should be considered in future research.

The survey for this research was conducted in January when students were facing the end of their semester. Low response rates may be the result of incorrect timing choices. From the aspect of data collection methods, researchers had made efforts to increase the response rate. Several attempts were made through repeated requests to respondents. However, the response rate was still quite low. Future research needs to consider the timing of distributing questionnaires so that the response rate is high.

REFERENCES

- Adhiputra, M. W. (2015). Aplikasi Technology Acceptance Model terhadap pengguna layanan internet banking. *Kalbisocio*, 2(1), 52–63.
- Aggorowati, M. A., Iriawan, N., Suhartono, and Gautama, N. (2012). Restructuring and expanding Technology Acceptance Model Structural Equation Model and Bayesian Approach. *American Journal of Applied Sciences*, 9(4), 496–504.
- Alambaigi, A. & Ahangari, I. (2016). Technology Acceptance Model (TAM) as a predictor model for explaining agricultural experts behavior in acceptance of ICT. *International Journal of Agricultural Management and Development*, 6(2), 235–247.
- Amoroso, D. L. & Magnier-Watanabe, R. (2012). Building a research model for mobile wallet consumer adoption: The case of mobile Suica in Japan. *Journal of Theoretical and Applied Electronic Commerce Research*, 7(1), 94–110.
- Bach, M. P., Čeljo, A. & Zoroja, J. (2016). Technology Acceptance model for business intelligence systems: preliminary research. *Procedia Computer Science*. The Author(s), 100, 995–1001.
- Biswas, A. (2016). Impact of social media usage factors on green choice behavior based on Technology Acceptance Model. *Journal of Advanced Management Science*, 11(2), 92–97.
- Chen, J. K. (2018). The influence of behavioural intention on third-party e-commerce payment. *South African Journal of Economic and Management Sciences*, 21(1), 1–9.
- Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two. *Management Science*, 35(8),

982-1003.

- Delone, W. & McLean, E. (2003). The DeLone and McLean Model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19, 9-30.
- Leiva, F.M, Climent, S.C., & Cabanillas, F.L. (2017). Determinants of intention to use the mobile banking apps: An extension of the classic TAM model. *Spanish Journal of Marketing - ESIC*, 21(1), 25-38.
- Galalae, C. & Voicu, A. (2013). Consumer behaviour research: Jacquard Weaving in the Social Sciences. *Management Dynamics in the Knowledge Economy*, 1(2), 1-1.
- Gbongli, K., Xu, Y. & Amedjonekou, K. M. (2019). Extended technology acceptance model to predict mobile-based money acceptance and sustainability: A multi-analytical structural equation modeling and neural network approach. *Sustainability (Switzerland)*, 11(13), 1-33.
- George, A. (2018). Determinants of behavioral intention to use mobile wallets-a conceptual model. *Journal of Management*, 5(5), 52-62..
- Ghozali, I. (2011). *Aplikasi analisis multivariate dengan program IBM SPSS19*. IV. Badan Penerbit Undip. Available at: <<https://teorionline.wordpress.com/2011/03/01/ghozali-imam-2007-aplikasi-analisis-multivariate-dengan-program-spss-cetakan-ke-iv-semarang-badan-penerbit-undip/>>.
- Harsanto, B., & Jatnika, D. (2017). Analysis of intention toward halal products: An empirical study of young consumers. *Journal of Economics, Business, & Accountancy Ventura*, 20(2), 203-212.
- Hidranto, F. 2020, 'E-Wallet kian tebal di tengah pandemi', *Indonesia.go.id*. Available at: <https://indonesia.go.id/narasi/indonesia-dalam-angka/ekonomi/e-wallet-kian-tebal-di-tengah-pandemi>.
- Ho, K. F., Ho, C. H. & Chung, M. H. (2019). Theoretical integration of user satisfaction and technology acceptance of the nursing process information system. *PLoS ONE*, 14(6), 1-14.
- Hussein, Z. (2017). Leading to Intention: The Role of attitude in relation to Technology Acceptance Model in e-learning. *Procedia Computer Science*, 105(December 2016), 159-164.
- Hutami, L. T. H. & Septyarini, E. (2018). Intensi penggunaan electronic wallet generasi millennial pada tiga startup "Unicorn" Indonesia Berdasarkan modifikasi TAM. *Jurnal Manajemen*, 8(2), 136-145.
- Igbaria, M. & Iivari, J. (1995). The effects of self-efficacy on computer usage. *Omega*, 23(6), 587-605.
- Kumar, K. S., Sivashanmugam, C., & Venkataraman, A. (2018). Intention to use mobile wallet: Extension of TAM model. *Journal of Electronic Systems*, 8(1), 27-34.
- Lai, P. (2017). The literature review of Technology Adoption Models and theories for the novelty technology. *Journal of Information Systems and Technology Management*, 14(1), 21-38.
- Liao, S., Hong, J.C., Wen, M.H., Pan, Y.C., & Wu, Y.W. (2018). Applying Technology Acceptance Model (TAM) to explore users' behavioral intention to adopt a performance assessment system for e-book production. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(10), em1601.
- Nanggala, A. Y. A. (2020). Use of fintech for payment: Approach to Technology Acceptance Model Modified. *Journal of Contemporary Information Technology, Management, and Accounting*, 1(1), 1-8.
- Olushola, T. & Abiola, J. O. (2017). The Efficacy of technology acceptance model: a review of applicable theoretical models in information technology researches. *Quest Journals Journal of Research in Business and Management*, 4(11). 2347-3002.
- Pishchenko, V. & Myriounis, A. (2016) *Consumer' s acceptance of new technology : A netnographic study on self-driving automobiles*. Uppsala University.
- Priantama, R. (2018). Implementasi Technology Acceptance Model (TAM) dan Information Systems Success Model (ISSM) dalam mengukur efektifitas penggunaan Sistem Informasi Sikaduku Universitas Kuningan: studi. *Jurnal Cloud Information*, 3(2), 20-27.
- Rizal, A. (2019). Nih! Sepuluh Daftar e-wallet terpopuler di Indonesia 2019 versi iPrice. *Info Komputer*.
- Sakdiyah, L., Effendi, R. & Kustono, A. S. (2019). Analisis penerimaan penggunaan e-learning dengan pendekatan theory of planned behavior (TPB) pada mahasiswa akuntansi Universitas Jember. *e-Jeba, JEBA*(2), 1-10.
- Santika, I. W. & Yadnya, I. P. (2017). Analisis Technology Acceptance Model terhadap penggunaan e-commerce pada UKM kerajinan Di Gianyar. *Prosiding Seminar Nasional AIMI*, 2015, 255-264.
- Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision Sciences*, 39(2), 273-315

- Wang, Y., Zhao, Q. & Zheng, D. (2005). Bottlenecks in production networks: An overview. *Journal of Systems Science and Systems Engineering*, 14(3), 347–363.
- Wasiaturrahma, W., Wahyuningtyas, Y. T. & Ajija, S. R. (2019). Non-cash payment and demand for real money in Indonesia. *Journal of Economics, Business, & Accountancy Ventura*, 22(1), 1-8
- Wong, W. H. & Mo, W. Y. (2019). A study of consumer intention of mobile payment in Hong Kong, based on perceived risk, perceived trust, perceived security and Technological Acceptance Model. *Journal of Advanced Management Science*, 7(2), 33–38.
- Yuwana, A. M. & Kustono, A. S. (2017). Why is User "s expertise important for implementation of regional asset information systems: Case in Indonesia. *International Journal of Science and Research (IJSR)*, 6(7), 377–379.