

The Effects of Perceived Usefulness and Perceived Ease of Use on the Use of “ShopeePay” E-Wallet Application

Ade Wulan Suri and Muhammad Ramadhan Slamet

Department of Business Management, Politeknik Negeri Batam, Jl. Ahmad Yani, Batam, Indonesia

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Abstract: Many factors influence a person in using the ShopeePay e-wallet. Therefore, this study aims to identify the factors that influence the use of the ShopeePay e-wallet. Factors that influence include perceived usefulness and ease of use based on the TAM (Technology Acceptance Model) theory. This research is a quantitative study using primary data from questionnaires. The questionnaire was distributed to 100 respondents, ShopeePay e-wallet users in Batam City who have used ShopeePay at least once. After testing the hypothesis using multiple regression analysis on 100 respondents, it is known that there is a significant influence between perceived usefulness and perceived ease of use toward the use of the ShopeePay e-wallet. This discovery is expected to be used as reference material regarding the ShopeePay e-wallet application by the people of Batam City.

1 INTRODUCTION

The increase in internet and mobile phone penetration has encouraged financial technology companies to develop payment systems, such as the use of e-wallet (Syifa & Tohang, 2020). E-wallet is used by the public as a non-cash payment instrument and is carried out using smartphone, thus facilitating the transaction process (Saputra, Rosiyadi, Gata, & Husain, 2019). In using an e-wallet, users simply register themselves through the e-wallet application they want to use (Safarudin, Kusdiby, & Senalajari, 2020). E-wallet application provides services such as a virtual place to store money, payments, withdrawals, transfers, and promotional offers such as store coupons. In addition, e-wallet application can also be used for transactions in online and offline stores (Syifa & Tohang, 2020). The various benefits provided by the e-wallet service ultimately encourage consumers to use e-wallet services (Sanawiri & Adroni, 2019).

In 2020, the number of e-wallet users in Indonesia is increasing. Based on data analysis conducted by iPrice and App Annie, there was an increase in e-wallet transactions from 1.67 billion to 2.83 billion or

an increase of 70% from June 2019 to June 2020¹. One of the reasons is due to the COVID-19 pandemic phenomenon which encourages people to use e-wallet. The COVID-19 pandemic has directed people to avoid activities that involve direct contact in accordance with World Health Organization (WHO) policies, such as payment processing (Aji, Berakon, & Husin, 2020). E-wallet as a digital payment tool is a platform that complies with the social distancing protocol set by the government to avoid the spread of COVID-19. This is because when transacting using e-wallet we will avoid physical contact and long queues (Revathy & Balaji, 2020).

One of the e-wallets with the highest transaction volume during the pandemic is ShopeePay. Based on research conducted by Snapcart in the June-August 2020 period, ShopeePay ranked first in terms of transaction value which was 34%, beating OVO, DANA, GoPay, and LinkAja. ShopeePay is also recorded as having the highest number of users with a percentage of 68%². ShopeePay itself is an e-wallet created to facilitate Shopee e-commerce transactions (Junadi & Sfenrianto, 2015). Based on research conducted by iPrice and App Annie, Shopee is the e-

¹ Accessible:

<https://iprice.co.id/trend/insights/top-e-wallet-di-indonesia-2020/>

² Accessible:

<https://databoks.katadata.co.id/datapublish/2020/09/09/shopeepay-kalahkan-ovo-gopay-saat-pandemi-corona>

commerce with the highest number of visitors in the fourth quarter of 2019 to the second quarter of 2020³. Results of a survey conducted by YouGov BrandIndex for January 1, 2019 until December 31, 2019, also showed Shopee is positioned on both the brand most recommended among the 717 brand. Shopee earned a percentage of 87.6% alongside Garuda Indonesia at 90.2% in the first position, and Samsung at 86.8% in the third position. That said, Shopee is the highest ranked e-commerce on the list⁴. The popularity of Shopee's e-commerce ultimately contributed to the use of ShopeePay, which is the payment instrument for that e-commerce.

Based on the Technology Acceptance Model (TAM) theory, there are two fundamental factors that influence users in using a system such as e-wallet, namely perceived usefulness and perceived ease of use (Davis, 1989). Perceived usefulness can be said as the benefits that consumers will get when using an e-wallet. These benefits consist of easy to transacting, increasing productivity, increasing effectiveness, and providing benefits when transacting. Meanwhile, perceived ease of use is formed from the easiness that consumers felt when using e-wallet, such as easy to learn, easy to obtain, easy to understand, easy to use when transacting, and easy to access anywhere (Isrososiawan, Hurriyati, & Dirgantari, 2019). So it is known that the use of e-wallet is influenced by factors such as perceived usefulness and perceived ease of use (Kusuma & Syahputra, 2020; Pertiwi, Suprpto, & Pratama, 2020; Saraswati & Purnamawati, 2020; Munoz-Leiva, Climent-Climent, & Liebana-Cabanillas, 2016; and Deb & David, 2014).

Previous research related to the effect of perceived usefulness on the use of e-wallet has been done before. Isrososiawan, Hurriyati, & Dirgantari (2019) in their research show that perceived usefulness has a significant influence on the use of e-wallet applications. This is because users will get many benefits when using the e-wallet application for transactions, so the higher the benefits, the higher the e-wallet application users. Similar results were found in previous research, that perceived usefulness has a significant effect on the use of e-wallet (Kusuma & Syahputra, 2020; Pertiwi, Suprpto, & Pratama, 2020; Saraswati & Purnamawati, 2020; Chawla & Joshi, 2019; Munoz-Leiva, Climent-Climent, & Liebana-Cabanillas, 2016; and Deb & David, 2014).

Different results are shown in Fong's (2016) that perceived usefulness does not have a significant effect on the use of e-wallet. This is because the

various benefits offered by the e-wallet application are considered to have no significant added value for consumers. The difference results of previous studies and Fong's (2016) study shows that there are inconsistent results regarding the effect of perceived usefulness with the use of e-wallet. In addition, this finding contradicts the TAM theory which reveals that perceived usefulness is a fundamental factor that influences the use of the system (Davis, 1989).

Research related to the effect of perceived ease of use on the use of e-wallet has also been carried out. Isrososiawan, Hurriyati, & Dirgantari (2019) showed a significant influence between perceived ease of use on the use of e-wallet. Perceived ease of use is defined as the ease of using the e-wallet application, which if it is easier to use, the customer interest in using the e-wallet application will be higher (Saraswati & Purnamawati, 2020). Other research by Kusuma & Syahputra (2020); Pertiwi, Suprpto, & Pratama (2020); Munoz-Leiva, Climent-Climent, & Liebana-Cabanillas (2016); and Deb & David (2014) also show similar results, that perceived ease of use has a significant influence on the use of e-wallet.

Differences in results were found in the studies of Chawla & Joshi (2019) and Fong (2016), related to factors that influence the use of e-wallet. This study shows that there is no significant relationship between perceived ease of use and the use of e-wallet. Perceived ease of use is known to have an indirect relationship with the intention to use e-wallet, which is mediated by perceived usefulness. This is because the ease of using an e-wallet will not be useful if customers perceive it as a valueless benefit (Aji, Berakon, & Riza, 2020). The difference in results found by Chawla & Joshi (2019) and Fong (2016), contradict the TAM theory, it also illustrates the inconsistency of results related to testing the effect of perceived ease of use on the use of e-wallet.

Referring to the research of Isrososiawan, Hurriyati, & Dirgantari (2019) which tested the effect of perceived usefulness and perceived ease of use on the DANA e-wallet application for postgraduate students at the Universitas Pendidikan Indonesia, this research is a form of replication of that research. Similar to this study, this study uses Davis (1989) Technology Acceptance Model (TAM) to determine the use of the ShopeePay e-wallet. This study also uses perceived usefulness and perceived ease of use as independent variables. However, unlike the research of Isrososiawan, Hurriyati, & Dirgantari (2019), this study uses the dependent variable of

³ Accessible:

<https://iprice.co.id/insights/mapofecommerce/>

⁴ Accessible:

<http://www.brandindex.com/ranking/indonesia/recommend>

ShopeePay e-wallet usage, namely the e-wallet with the highest number of users and transaction values in Indonesia. This research is aimed at the people of Batam City who use ShopeePay. This was due to an increase in transactions (244%) and users (1.12%) of electronic money both server or card-based in the first quarter - second quarter of 2020 in the Riau Islands. In addition, there was an increase in the number of traders using the Quick Response Indonesian Standard (QRIS) that reach 35,983 in June 2020, with 28,476 in Batam⁵. This was triggered by the people of Batam City, which 80% already used the internet in 2017⁶.

Based on the explanation above, this study aims to identify the effect of perceived usefulness and perceived ease of use on the use of the ShopeePay e-wallet application. This is because there are many factors that influence the use of e-wallet, and the main factors of this use are actually difficult to study (Susilo, Prabowo, Pustikaningsih, & Samlawi, 2019). This was proven by several previous studies which showed an insignificant effect of perceived usefulness and perceived ease of use on the use of e-wallet, contrary to the TAM theory. This study was conducted to re-examine that perceived usefulness and perceived ease of use have a significant effect on the use of e-wallet. Researchers formulate several problems. First, perceived usefulness has a significant effect on the use of ShopeePay e-wallet. Second, whether perceived ease of use has a significant effect on the use of ShopeePay e-wallet. This research is expected to provide benefits, both in the development of knowledge related to TAM theory and as a reference regarding the use of ShopeePay e-wallet application by the people of Batam City.

2 LITERATURE REVIEW AND HYPOTHESIS

2.1 Literature Review

2.1.1 Technology Acceptance Model (TAM)

TAM was first proposed by Davis (1986) as an adaptation of Theory of Reasoned Action (TRA) (Fishbein, Ajzen, & Flanders, 1975). Davis (1986) explains the concept of TAM aims to develop and test

⁵ Accessible:

<https://www.bi.go.id/id/publikasi/kajian-ekonomi-regional/kepri/Pages/Laporan-Perekonomian-Provinsi-Kepulauan-Riau-Agustus-2020.aspx>

⁶ Accessible:

a theoretical model related to the effect of system characteristics on the acceptance of technology-based information systems. TAM believes that perceived usefulness and perceived ease of use are two fundamental factors that stimulate consumers in using technology systems (Davis, 1989 and Venkatesh & Davis, 2000). In addition, the model illustrates that external factors (system characteristics), internal beliefs (perceived usefulness and perceived ease of use), attitudes, behavioural intentions, and usage, influence each other (Davis, Bagozzi, & Warshaw, 1989).

Davis (1986) explains that external factors in TAM directly affect perceived usefulness and perceived ease of use, but have an indirect effect on attitudes or behaviour. Perceived usefulness and perceived ease of use are the two main factors that influence customer attitudes in using a system. In addition to influencing customer attitudes, perceived ease of use also affects perceived usefulness. This is because an easy-to-use system will improve performance, resulting in an increase in the benefits or usability of the system. Therefore, external factors will affect perceived usefulness indirectly through perceived ease of use. Perceived usefulness and usage attitudes will then influence behavioural intentions to use the system, which in turn will determine whether consumers actually use the system or not.

2.1.2 Perceived Usefulness

Perceived usefulness is defined as the extent to which a person believes that using a particular system will improve their work performance or productivity level (Davis, 1989). Perceived usefulness consists of easy to transaction, increased productivity in transactions, increased effectiveness in transactions, useful in conducting transactions, and providing more benefits in transactions (Isrososiawan, Hurriyati, & Dirgantari, 2019).

2.1.3 Perceived Ease of Use

Perceived ease of use is defined as the extent to which a person believes that using a particular system will reduce the effort expended when carrying out an activity (Davis, 1989). Perceived ease of use consists of ease of learning applications, ease of getting applications, ease of understanding applications, ease

<https://mediacenter.batam.go.id/arsip/berita-pengguna-internet-indonesia-umumnya-untuk-media-sosial.html>

of use when transacting, and ease of access (Isrososiawan, Hurriyati, & Dirgantari, 2019).

2.1.4 Use of E-Wallet

The use of e-wallet can be interpreted as a customer's actions in owning, maintaining, and using an e-wallet application in transactions (Singh, Srivastava, & Sinha, 2017). There are factors that influence customers to have financial technology applications such as e-wallet, including perceived ease of use and perceived usefulness (Amin, Azhar, Amin, & Akter, 2015). Perceived usefulness and perceived ease of use are theoretically believed to be fundamental determinants in the use of e-wallet applications (Davis, 1989). In addition to these two factors, there are also characteristics in the use of e-wallet applications consisting of mobility, reachability, compatibility, and convenience (Isrososiawan, Hurriyati, & Dirgantari, 2019; and Kim, Mirusmonov, & Lee, 2010).

2.2 Hypothesis

2.2.1 Perceived Usefulness and ShopeePay E-Wallet Usage

Consumers believe that using an e-wallet application will increase their productivity in carrying out daily activities, assist in increasing performance effectiveness, and greatly assist in transactions. Consumers who believe that by using an e-wallet they will get these benefits, they will intend to use an e-wallet application (Kustono, Nanggala, & Mas'ud, 2020). Therefore, it can be said that the higher the perceived usefulness, the higher the use of e-wallet applications (Saraswati & Purnamawati, 2020 and Pertiwi, Suprpto, & Pratama, 2020). This is in line with the research of Isrososiawan, Hurriyati, & Dirgantari (2019) which found that perceived usefulness has a significant influence on the use of e-wallet. Similar results were found in other studies related to factors that influence the use of e-wallet, that there is a significant influence between perceived usefulness on the use of e-wallet (Kusuma & Syahputra, 2020; Pertiwi, Suprpto, & Pratama, 2020; Saraswati & Purnamawati, 2020; Chawla & Joshi, 2019; Munoz-Leiva, Climent-Climent, & Liebana-Cabanillas, 2016; and Deb & David, 2014).

Based on Technology Acceptance Model (TAM) which examines the acceptance model of computer-based information systems, that external factors (system characteristics), internal beliefs (perceived usefulness and perceived ease of use), attitudes,

behavioural intentions, and usage, influence each other (Davis, Bagozzi, & Warshaw, 1989). Davis (1989) explained that perceived usefulness or benefits of a system such as an e-wallet in helping work is a driving force for consumers to use the application. This is because in deciding to use or not to use a system, consumers believe that the capabilities or benefits provided by the system in helping work are important. Based on this statement, the following hypotheses can be drawn:

H1: Perceived usefulness has a significant effect on the use of ShopeePay e-wallet.

2.2.2 Perceived Ease of Use and ShopeePay E-Wallet Usage

In the context of using technology such as e-wallet, perceived ease of use is an important factor, because the purpose of using technology is as a solution to make it easier for us to do activities (Syifa & Tohang, 2020). This convenience then creates a good perception, thus encouraging users to increasingly use e-wallet applications as a means of payment (Sanawiri & Adroni, 2019). This is because the higher the perceived ease of use, the higher the use of e-wallet applications (Saraswati & Purnamawati, 2020 and Pertiwi, Suprpto, & Pratama, 2020). This statement is in line with the research of Isrososiawan, Hurriyati, & Dirgantari (2019) which found that perceived ease of use has a significant influence on the use of e-wallet. Similar results were found in other studies related to factors that influence the use of e-wallet, that there is a significant influence between perceived ease of use on the use of e-wallet (Kusuma & Syahputra, 2020; Pertiwi, Suprpto, & Pratama, 2020; Saraswati & Purnamawati, 2020; Munoz-Leiva, Climent-Climent, & Liebana-Cabanillas, 2016; and Deb & David, 2014).

Based on the Technology Acceptance Model (TAM) which examines the acceptance model of computer-based information systems, external factors (system characteristics), internal beliefs (perceived usefulness and perceived ease of use), attitudes, behavioural intentions, and use, influence each other (Davis, Bagozzi, & Warshaw, 1989). Davis (1989) explained that perceived ease of use or ease in using systems such as e-wallet to carry out the functions provided is a driving force for consumers to use the system. This is because although consumers believe the system has many benefit, consumers must also believe that the system is easy to use so that the effort they spend on using the system is in accordance with

the benefits that will be obtained. Based on this statement, the following hypotheses can be drawn:

H2: Perceived ease of use has a significant effect on the use of ShopeePay e-wallet.

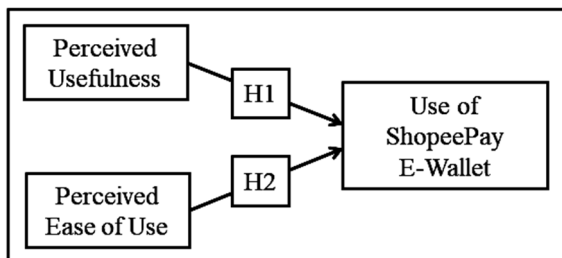


Figure 1: Research Model.

3 RESEARCH METHODS

This study uses a quantitative method approach that is proven to be able to use to examine factors in the use of e-wallet, and has been widely used in similar studies (Kusuma & Syahputra, 2020).

3.1 Data Types and Source

This research data is primary data obtained from survey through a web-based questionnaire which is a form of adoption from the research of Isrososiawan, Hurriyati, & Dirgantari (2019). The using of questionnaire as a research instrument is because the questionnaire is able to provide data regarding the reasons why customers use e-wallet in detail, at once in large quantities, and can be designed according to what the researcher wants (Sinha, Majra, Hutchins, & Saxena, 2018). The questionnaire in this study used a likert scale measurement, or interval data (Lind, Marchal, & Wathen, 2012). The following are the indicator variables used in the preparation of the questionnaire.

Table 1: Indicator Variable.

| Variable | Indicators |
|---------------------------|---|
| Perceived usefulness | (1) ShopeePay makes transactions easy. (2) ShopeePay increases the productivity in transactions. (3) ShopeePay increases effectiveness in transactions. (4) ShopeePay is useful in conducting transactions. (5) ShopeePay providing more benefits in transactions. (Isrososiawan, Hurriyati, & Dirgantari, 2019) |
| Perceived ease of use | (1) ShopeePay is easy to learn. (2) ShopeePay is easy to obtain. (3) ShopeePay is clear an easy to understand. (4) ShopeePay is easy to use in transactions. (5) ShopeePay is easy to acces anywhere. (Isrososiawan, Hurriyati, & Dirgantari, 2019) |
| Use of ShopeePay e-wallet | Mobility (1) ShopeePay usable anytime. (2) ShopeePay usable anywhere. (3) ShopeePay usable when travelling. Reachability (1) ShopeePay can be accessed with smartphone. (2) ShopeePay payment can be done outside of ShopeePay's partner. Compatibility (1) ShopeePay adaptable to existing technology. (2) ShopeePay adaptable to daily activities. Convenience (1) ShopeePay is convenient to use because users often use smartphone. (2) ShopeePay is convenient to use because it can be used in various conditions. (3) ShopeePay is convenient to use because it is not difficult to use. (Isrososiawan, Hurriyati, & Dirgantari, 2019) |

3.2 Location and Objects

The location and the object of this study is user of e-wallet ShopeePay in Batam. The reason for choosing the location is due to the phenomenon of an increase in transaction value and electronic money users, both server-based and card-based, as well as an increase in merchants using QRIS in Batam City. Furthermore, the reason for choosing ShopeePay users is because the number of users and the transaction value of e-wallet ShopeePay is the largest in Indonesia.

3.3 Sample

Sample collected is 100 samples, which is determined using the Lemeshow technique (Lemeshow, Hosmer Jr., Klar, and Lwanga, 1990). The sampling technique is convenience sampling, with ShopeePay e-wallet users in Batam City who have transacted using ShopeePay at least once as criteria.

3.4 Data Analysis Technique

The data obtained from the questionnaire was then processed using MS. Excel and SPSS version 22 for further analysis. This study uses descriptive and statistical data analysis techniques. The descriptive analysis carried out includes an explanation of the results of the processed data so that it is easier to understand. The statistical analysis carried out includes a test of the effect with multiple linear regressions. However, before that, the instrument was tested for validity and reliability. In addition, the classic assumption test was also carried out, such as normality, multicollinearity, and heteroscedasticity tests. The multiple linear regression equation formed is as follows:

$$Y = a + b_1X_1 + b_2X_2 + e \quad (1)$$

Information:

Y = ShopeePay e-wallet usage

A = Constant

b₁ = Estimated coefficient of perceived usefulness

b₂ = Estimated coefficient of perceived ease of use

X₁ = Perceived usefulness

X₂ = Perceived ease of use

Multiple linear regressions have a provision that if the value of X (perceived usefulness and perceived ease of use) is equal to zero, then the value of Y (use of ShopeePay e-wallet) will increase or decrease by a (constant). In addition, if the value of X₁ (perceived usefulness) increases by one unit while the value of the other variable (perceived ease of use) remains, then the value of Y (use of ShopeePay e-wallet) will increase or decrease by b₁ (estimated coefficient of perceived usefulness). The same provisions occur in X₂ (perceived ease of use).

In addition, multiple linear regressions can show the effect of the independent variable on the dependent variable whether it is significant or not. If the $t_{count} > t_{table}$ (1.66) or the significance value $< \alpha$, it can be said that the influence of the independent variables perceived usefulness and perceived ease of use is significant toward the dependent variable the

ShopeePay e-wallet usage, and vice versa. Analysis of coefficient of determination is also done by looking at that result, especially the value of Adjusted R Square. Because it is known that the use of e-wallet can be explained by perceived usefulness and perceived ease of use by the percentage value of Adjusted R Square, while the remaining percentage value represents by other factors (Isrososiawan, Hurriyati, & Dirgantari, 2019; Ariawaty & Evita, 2018 and Lind, Marchal, & Wathen, 2012).

4 RESULT

4.1 Respondent Characteristic

Based on the results of 100 questionnaires which have been collected, the respondents had the following characteristics as seen in the table below.

Table 2: Respondent Characteristic.

| Characteristic | Frequency | Percentage |
|---------------------------|-----------|------------|
| Age : | | |
| 11-20 | 23 | 23% |
| 21-30 | 76 | 76% |
| 31-40 | 1 | 1% |
| 41-50 | 2 | 2% |
| Gander : | | |
| Woman | 89 | 89% |
| Man | 11 | 11% |
| Income : | | |
| < 2 million | 67 | 67% |
| 2 million -5 million | 18 | 18% |
| 5 million - 10 million | 12 | 12% |
| > 10 million | 3 | 3% |
| Profession : | | |
| Private employee | 25 | 25% |
| Civil servant | 3 | 3% |
| College students | 59 | 59% |
| Others | 13 | 13% |
| First use : | | |
| 2018 | 17 | 17% |
| 2019 | 39 | 39% |
| 2020 | 44 | 44% |
| Information acquisition: | | |
| Brochure | 40 | 40% |
| Advertising | 8 | 8% |
| Exhibition | 49 | 49% |
| Others | | |
| Purchasing determinants : | | |
| Self | 70 | 70% |
| Friends | 24 | 24% |
| Parents | 1 | 1% |
| Others | 5 | 5% |

Based on Table 2 above, it is known that most respondents who filled out the questionnaire were in the age range of 21-30 years with a percentage of 76%. Meanwhile, in terms of gender, female respondents dominated with 89%. Meanwhile, in terms of income, respondents with an average monthly income of less than Rp2 million got the highest percentage gain, which was 67% compared to others. Based on profession, respondents were dominated by college students with a percentage of 59%. In addition, in terms of when the respondent first used the ShopeePay e-wallet, most respondent first use it in 2020, which was represented by 44%. Furthermore, it is also known that respondents obtain ShopeePay information from other factors apart from brochures, advertisements, or exhibitions. This proofs by 49% result. Finally, the determinant of purchasing with ShopeePay e-wallet dominates by their own will with a percentage of 70%.

4.2 Instrumentation Test

4.2.1 Validity Test

Validity test can be done to test the measurement accuracy of an instrument. Validity test is done by looking at the r_{counts} value and r_{table} . If $r_{counts} > r_{table}$ (0,1654) then the instrument is said to be valid (Sanawiri & Adroni, 2019).

Table 3: Validity Test Result.

| Variable | Item | r_{counts} | r_{table} | Result |
|------------------------------|-------|--------------|-------------|--------|
| Perceived usefulness (PU) | PU1 | 0,821 | 0,1654 | Valid |
| | PU2 | 0,688 | 0,1654 | Valid |
| | PU3 | 0,842 | 0,1654 | Valid |
| | PU4 | 0,798 | 0,1654 | Valid |
| | PU5 | 0,742 | 0,1654 | Valid |
| Perceived ease of use (PEOU) | PEOU1 | 0,831 | 0,1654 | Valid |
| | PEOU2 | 0,746 | 0,1654 | Valid |
| | PEOU3 | 0,889 | 0,1654 | Valid |
| | PEOU4 | 0,702 | 0,1654 | Valid |
| | PEOU5 | 0,748 | 0,1654 | Valid |
| Usage (KP) | KP1 | 0,808 | 0,1654 | Valid |
| | KP2 | 0,752 | 0,1654 | Valid |
| | KP3 | 0,787 | 0,1654 | Valid |
| | KP4 | 0,573 | 0,1654 | Valid |
| | KP5 | 0,764 | 0,1654 | Valid |
| | KP6 | 0,654 | 0,1654 | Valid |
| | KP7 | 0,781 | 0,1654 | Valid |
| | KP8 | 0,699 | 0,1654 | Valid |
| | KP9 | 0,750 | 0,1654 | Valid |
| | KP10 | 0,789 | 0,1654 | Valid |

Based on Table 3, it is known that the questions on the perceived usefulness variable are said to be

valid. This is proven by the value of r_{counts} from the results of data processing using SPSS, that the five questions related to the perceived usefulness variable have an r_{counts} value that is greater than r_{table} . The same thing was obtained for the questions related to the perceived ease of use variable. The five questions about the perceived ease of use variable obtained a r_{counts} value that is greater than the r_{table} . Therefore, the five questions on the perceived ease of use variable are said to be valid. Likewise with the questions on the ShopeePay e-wallet usage variable, the results show that the ten questions were tested valid. Because the r_{counts} results obtained for the ten questions are greater than the r_{table} . Because based on the previous explanation, if $r_{counts} > r_{table}$ (0,1654) then the question used from the instrument is said to be valid.

4.2.2 Reliability Test

Reliability testing is used to determine whether the measuring instrument's ability is consistent, can be trusted, and reliable. This study used Cronbach's Alpha technique to test it. If Cronbach's Alpha $>$ 0.60 then the data generated from the research instrument is said to be reliable (Sanawiri & Adroni, 2019).

Table 4: Reliability Test Result.

| Variable | Cronbach's Alpha | Alpha | Result |
|----------|------------------|-------|----------|
| PU | 0,832 | 0,60 | Reliable |
| PEOU | 0,845 | | Reliable |
| KP | 0,903 | | Reliable |

Based on Table 4, it is known that Cronbach's Alpha of perceived usefulness variable is 0.832, perceived ease of use is 0.845, and the use of ShopeePay e-wallet is 0.903. The three Cronbach's Alpha values were proven to be greater than 0.6, so it can be concluded that the questions from the questionnaires posed to respondents as instruments in this study were tested to be reliable.

4.3 Classic Assumption Test

4.3.1 Normality Test

To find out if the data is normally distributed or not, it is necessary to do a normality test. The classical assumption will be fulfilled if the data is normally distributed. A data is said to be normally distributed if it meets the terms of a significance value $>$ α (0.1) (Duli, 2019).

Table 5: Normality Test Result.

| | |
|----------------------|-------|
| Asymp.Sig.(2-tailed) | Alpha |
| 0,200 | 0,1 |

Based on Table 5, the results of the normality test using Kolmogorof-Smirnov on SPSS obtained Asymp.Sig. of 0.200. So it is known that the significance value $> \alpha$, or $0.200 > 0.1$. Therefore, it can be concluded that the tested data were normally distributed.

4.3.2 Multicollinearity Test

This test is conducted to determine whether there is a linear relationship between the independent variables and the regression model. The classical assumption will be fulfilled if it is free from multicollinearity or there is no relationship between the independent variables and the regression model. This will be achieved if $VIF < 10$ or the tolerance > 0.1 (Ariawaty & Evita, 2018 and Lind, Marchal, & Wathen, 2012).

Table 6: Multicollinearity Test Result.

| Variable | Tolerance | VIF |
|----------|-----------|-------|
| PU | 0,675 | 1,482 |
| PEOU | 0,675 | 1,482 |

Based on Table 6, it is known that the tolerance value of the perceived usefulness and perceived ease of use variables is 0.675, respectively. This shows that perceived usefulness and perceived ease of use have a tolerance value > 0.1 or $0.675 > 0.1$. In addition, it is also known that the VIF value of the perceived usefulness and perceived ease of use variables is 1.482, respectively. This shows that perceived usefulness and perceived ease of use have a VIF value ($1.482 < 10$). So it can be concluded that the independent variables perceived usefulness and perceived ease of use do not have a linear relationship with the regression model or can be said free from multicollinearity.

4.3.3 Heteroscedasticity Test

This test is carried out to determine whether there is a variance inequality from the residuals on all tests or to determine the presence of heteroscedasticity deviations. The classical assumption is fulfilled if the linear regression is free from heteroscedasticity with conditions that the significance value is $> \alpha$ (0.1) (Isrososiawan, Hurriyati, & Dirgantari, 2019).

Table 7: Heteroscedasticity Test Result.

| Variable | Sig | Alpha |
|----------|-------|-------|
| PU | 0,320 | 0,1 |
| PEOU | 0,425 | |

Based on Table 7, it is known that the significance value of the perceived usefulness and perceived ease of use variables from the results of data processing using SPSS is 0.320 and 0.425, respectively. This shows that perceived usefulness has a significance value $> \alpha$, or $0.320 > 0.1$. The same thing happened to the perceived ease of use which also had a significance value $> \alpha$, or $0.425 > 0.1$. So it can be concluded that in the regression model there is no heteroscedasticity deviation.

4.4 Hypothesis Test

Table 8: Multiple Linear Regression Test Result.

| Variable | Unst d. B | Std. Coeff. Beta | t | Sig. | Adj. R square |
|----------|-----------|------------------|-------|-------|---------------|
| Constant | 9,557 | | 2,829 | 0,006 | 0,508 |
| PU | 0,503 | 0,246 | 2,861 | 0,005 | |
| PEOU | 1,031 | 0,551 | 6,414 | 0,000 | |

Based on Table 8, it is known that the multiple linear regression equation formed is as follows:

$$Y = 9,557 + 0,246X_1 + 0,551X_2 + e \quad (2)$$

The equation above shows that the constant value is 9.557. This can be interpreted if the value of the perceived usefulness and perceived ease of use variables is equal to zero, then the value of the ShopeePay e-wallet usage variable will increase by 9.557. The equation above also shows that if the value of X1 (perceived usefulness) increases by one unit, while the value of the other variable (perceived ease of use) remain, then the value of Y (use of ShopeePay e-wallet) will increase by 0.246. Likewise, if there is an increase of one unit in X2 (perceived ease of use), while the value of the other variable (perceived usefulness) remains, thus the value of Y (use of ShopeePay e-wallet) will increase by 0.551. Table 8 also shows the Adjusted R Square value of 0.508 or 50.8%. This shows that the use of ShopeePay e-wallet is influenced by the perceived usefulness and perceived ease of use by 50.8%. Meanwhile, the rest 49.2% is influenced by other factors.

4.4.1 Perceived Usefulness on the Use of ShopeePay E-Wallet

Table 8 shows how much influence perceived usefulness has on the use of ShopeePay e-wallet. It can be seen from the t value of 2.861 and the significance value of 0.005. This value can be interpreted that perceived usefulness has a $t_{\text{counts}} > t_{\text{table}}$ or $2.861 > 1.66$, and a significance value $< \alpha$, or $0.005 < 0.1$. So it can be concluded that perceived usefulness has a significant effect on the use of ShopeePay e-wallet, which means that **H1 is supported**.

4.4.2 Perceived Ease of Use on the Use of ShopeePay E-Wallet

Table 8 shows how much influence the perceived ease of use has on the use of the ShopeePay e-wallet. It can be seen from the t value of 6.414 and the significance value of 0.000. This value can be interpreted that the perceived ease of use has a value of $t_{\text{counts}} > t_{\text{table}}$ or $6.414 > 1.66$, and a significance value $< \alpha$, or $0.000 < 0.1$. So it can be concluded that perceived ease of use has a significant influence on the use of ShopeePay e-wallet, which means **H2 is supported**.

4.5 Data Analysis

4.5.1 Perceived Usefulness on ShopeePay's E-Wallet Usage

Perceived usefulness has a significant influence on the use of ShopeePay e-wallet, as proven by the t_{counts} value of $2.861 > 1.66$, and a significance value of $0.005 < 0.1$. These results are in accordance with the TAM (Technology Acceptance Model) theory which explained that perceived usefulness is one of the fundamental factors that drive the use of a system. In TAM theory, Davis (1989) explains that the perceived usefulness or benefits of a system in helping work, as well as the benefits contained in e-wallet, is a driving force for consumers to use the application. That's because in deciding to use or not to use a system, consumers believe that the capabilities or benefits provided by the system in helping work are important.

This also indicates that factors such as easy to transactions, increased productivity in transactions, increased effectiveness in transactions, useful in conducting transactions, and provide more benefits in transactions, are able to increase or encourage consumers to use the ShopeePay e-wallet. Thus, it is

evident that perceived usefulness has a significant influence on the use of the ShopeePay e-wallet. This statement indicates that the purpose of this research related to the identification of factors that influence the use of ShopeePay e-wallet and the effect of perceived usefulness on the use of ShopeePay e-wallet is fulfilled.

The results of hypothesis testing in this study are in line with the research of Isrososiawan, Hurriyati, & Dirgantari (2019) which found that perceived usefulness has a significant influence on the use of e-wallet. Similar results were found in other studies related to factors that influence the use of e-wallet, that there is a significant influence between perceived usefulness on the use of e-wallet (Kusuma & Syahputra, 2020; Pertiwi, Suprpto, & Pratama, 2020; Saraswati & Purnamawati, 2020; Chawla & Joshi, 2019; Munoz-Leiva, Climent-Climent, & Liebana-Cabanillas, 2016; and Deb & David, 2014).

4.5.2 Perceived Ease of Use on ShopeePay's E-Wallet Usage

Perceived ease of use has a significant influence on the use of ShopeePay e-wallet, as proven by the t_{counts} value of $6.414 > 1.66$, and a significance value of $0.000 < 0.1$. These results are in accordance with the TAM (Technology Acceptance Model) theory which explained that perceived ease of use is one of the fundamental factors that encourage the use of a system. In TAM theory, Davis (1989) explains that ease of use in carrying out the functions of a system, such as e-wallet, is a factor that encourages consumers to use the system. This is because, although consumers believe that the system is useful in helping their work, consumers must also believe that the system is easy to use so that the effort they spend on using the system is in accordance with the benefits that will be obtained.

In addition, the results also show that there are several convenience factors that affect the use. These convenience factors include ease of learning the application, ease of getting applications, ease of understanding the application, ease of use when transacting, and ease of access, have an influence on increasing or encouraging consumers to use the ShopeePay e-wallet. So it is proven that perceived ease of use has a significant influence on the use of ShopeePay e-wallet. These results are in accordance with the purpose of this study, which is to identify factors that influence the use of ShopeePay e-wallet and the effect of perceived ease of use on the use of ShopeePay e-wallet.

The results of the hypothesis test in this study are in line with the research of Isrososiawan, Hurriyati, & Dirgantari (2019) which found that perceived ease of use had a significant effect on the use of e-wallet. Similar results were also found in other studies related to factors that influence the use of e-wallet, that there is a significant influence between perceived ease of use on the use of e-wallet (Kusuma & Syahputra, 2020; Pertiwi, Suprpto, & Pratama, 2020; Saraswati & Purnamawati, 2020; Munoz-Leiva, Climent-Climent, & Liebana-Cabanillas, 2016; and Deb & David, 2014).

5 DISCUSSION AND CONCLUSION

5.1 Conclusion

This study aims to examine the effect of perceived usefulness and perceived ease of use on the use of ShopeePay e-wallet in Batam City. Based on the results of the analysis, there are several conclusions that can be drawn such as:

- (1) Perceived usefulness has a significant influence on the use of e-wallet ShopeePay. Because perceived usefulness is one of the fundamental factors that encourage the use of systems such as e-wallet, as stated in the TAM theory proposed by Davis (1986). It is mean, the amount of benefits or experienced which consumers felt later will affect or encourage the use of ShopeePay e-wallet. Some of the factors that encourage this are easy to transactions, increased productivity in transactions, increased effectiveness in transactions, useful in conducting transactions, and providing more benefits in transactions.
- (2) Perceived ease of use has a significant influence on the use of ShopeePay e-wallet, as stated by Davis (1986) on TAM theory. It stated that perceived ease of use is one of the fundamental factors that encourage people to use systems such as e-wallet. This is because the various conveniences or experienced which consumers felt will influence or encourage the use of ShopeePay e-wallet. The primary factors include the ease of learning the application, the ease of getting the application, the ease of understanding the application, the ease of use when transacting, and the ease of access.

5.2 Implication

This study was conducted to identify the effect of perceived usefulness and perceived ease of use on the use of ShopeePay e-wallet. After doing research, it is known that perceived usefulness and perceived ease of use have a significant influence on the use of ShopeePay e-wallet. These results are a form of using the TAM theory in order to add insight for researchers and readers, and are expected to be a reference regarding the ShopeePay e-wallet usage of the people in Batam City.

5.3 Limitation

The researcher realizes that in conducting this research, there are still some limitations. First, there are still many people in Batam City who have not used the ShopeePay e-wallet, especially the people closest to the researcher, so it takes quite a while to collect questionnaire data. Second, the sample used is limited to ShopeePay e-wallet users in Batam City, thus allowing for differences in results if done using samples outside Batam City. Third, the results of the analysis using adjusted R square show that perceived usefulness and perceived ease of use only represent 50.2% of the factors that influence the use of ShopeePay e-wallet. While 49.8% is influenced by other factors that the researchers did not examine in this study.

5.4 Suggestion

Based on the limitations described, the researcher suggests several things that can be used as a reference in further research. First, using a sample that is not only limited to ShopeePay e-wallet users in Batam City. Second, develop or add the variables using the latest theories to represent 49.8% of other factors that might influence the use of ShopeePay e-wallet in Batam City. Third, examine more deeply factors that are the reasons consumers using ShopeePay e-wallet by conducting direct interviews with consumers.

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