THE EFFECT OF PERCEIVED RISK ON INTENTION TO USE OF E-WALLET IN JABODETABEK WITH THE MEDIATION OF PERCEIVED USEFULNESS AND PERCEIVED EASE OF USE

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Abstract

This study aims to determine the influence of Perceived Risk, Perceived Usefulness and Perceived Ease of Use on Intention to use and to see the role of Perceived Usefulness and Perceived Ease of Use as Mediating variables. The researcher used purposive sampling to 125 e-wallet user respondents. This study used the Partial Least Square Structural Equation Model (PLS-SEM). The Perceived Risk variable was analyzed using outer loading first order to determine the role of its dimensions consisting of Privacy risk, financial risk, Time risk, psychological risk, and security risk. The results of the study showed that Perceived Risk had a significant negative effect on Perceived Usefulness and Perceived Ease of Use. The study also showed that the Perceived Usefulness and Perceived Ease of Use variables had a positive and significant effect on intention to use E-wallet. Furthermore, Perceived Usefulness and Perceived Ease of Use significantly mediated the influence of perceived risk on intention to use e-wallet.

Keywords: Perceived Risk, Perceived Usefulness, Perceived Ease of Use, Intention to Use

Introduction

The Industrial Revolution 4.0 has brought Indonesia to the digitalization of financial processes, including online banking, mobile payments, and electronic invoicing. The digitalization of financial processes has facilitated faster and more convenient transactions for individuals and businesses, reducing dependence on traditional banking methods. E-wallet is a digital payment method that allows users to make electronic transactions without the need for cash or traditional banking methods. E-wallet is usually used for online shopping, bill payments, and peer-to-peer transactions.

Digital transactions have continued to increase since the Covid-19 pandemic broke out. The Mandiri Institute survey shows that OVO is the most widely used e-wallet by micro, small and medium enterprises (MSMEs) in carrying out online transactions. In detail, as many as 72% of MSME respondents use OVO. Then, GoPay follows in second place with a percentage of 66% and LinkAja in third place with a percentage of 64%.

The next ones that are also on the list are Shopee Pay with a percentage of 52% and DANA with a percentage of 27%. However, the penetration rate of MSME digital payments is still relatively low. The research shows that 51% of MSMEs do not make non-cash transactions. This research was conducted online on 505 MSME actors in Indonesia. The survey, conducted in March-April 2021, aims to see the recovery of MSMEs and their digital penetration. (Annur, 2021) According to a 2018 McKinsey report, e-wallets provide benefits as financial automation and emerging market business opportunities for providers. Many individuals and small businesses in developing countries are currently unable to participate in the formal financial system. Around two billion individuals and 200 million small businesses in developing countries now do not have proper credit for various reasons. Transactions are carried out exclusively with cash. Sometimes, there is no safe mechanism to store and invest their money and rely on informal lenders and personal networks to get it. Data from katadata shows that the number of e-wallet users in Indonesia is less than 25% of the Indonesian population (Annur, 2021). The successful adoption of e-wallets in financial automation requires strategies that can reach individuals and small businesses to significantly improve their financial lives (Osafo-Kwaako et al., 2018).

Online shopping is inherently risky for consumers. Consumers will face uncertainty in transactions that are influenced by factors beyond their control, such as the independent actions of others (e.g., potentially trustworthy web vendors, hackers, and unknown new technologies). When consumers have to make decisions under these uncertain conditions, trust plays an important role in suppressing certain risk factors. Therefore, trust is an important strategy to overcome the Perceived Risk of uncertain and uncontrollable transactions (Kim et al., 2008).

Perceived risk is related to the security of technology. Security is the main reason for the intention to use e-wallets in making online transactions. Users who feel safe in transacting using e-wallets will increase trust and want to use this technology (Kim et al., 2008; Wiradinata, 2019). Initially, perceived risk was limited to fraud or product quality, but now, the definition has changed to potential losses in achieving desired results when using electronic services. There are seven types of risks, namely performance risk, psychological risk, financial risk, privacy risk, time risk, social risk, and overall risk. Because consumers understand and weigh risks when assessing products/services for purchase/adoption, and this may be the cause of anxiety and

discomfort in using e-wallets (Mutahar et al, 2018). The Technology Acceptance Model (TAM) variables proposed by Davis (Alharbi, S., and Drew, S., 2014), namely perceived usefulness, perceived ease of use, are in accordance with previous TAM research by Ghaliyah (2022). The Perceived Risk variable and its effect on TAM are in accordance with TAM research on mobile banking by Mutahar et al. (2018). Perceived Risk is the main factor that can weaken the perception of perceived usefulness and perceived ease of use, while perceived usefulness and perceived ease of use are considered the main predictors of intention (Mutahar et. al, 2018). The results of this study will provide an overview of the relationship between each of these variables for E-wallet. The results of the current study will provide additional insight into strategies for expanding digital wallet services in the Jabodetabek area. Based on the phenomena that have been described, this study aims to determine whether perceived risk has an impact

Literature Review

The researcher uses the Technology Acceptance Model (TAM) theory to explain user intention to use E-wallet. TAM argues that the target behavior of system acceptance and use can be predicted based on the user's Behavioral Intention to Use, and two internal beliefs, namely Perceived Usefulness and Perceived Ease of Use. According to TAM, Behavioral Intention is a variable that can predict the actual use of the system, which determines whether the technology has been accepted. Behavioral Intention to Use is influenced by Attitude Towards Using, while Attitude has two determinant variables, namely Perceived Usefulness and Perceived Ease of Use. Perceived Usefulness is directly influenced by Perceived Ease of Use.

Based on previous research conducted by Mutahar (2018), the external variable perceived risk influences two important TAM factors (perceived ease of use, perceived usefulness) which then determine the intention to use mobile banking services. The results of the study showed that perceived risk has a significant negative effect on perceived ease of use, which means that the higher the risk perception, the lower the perception of ease of use by the client. Perceived risk also has a significant negative effect on perceived usefulness. Based on the context of using E-wallet Perceived risk consists of Privacy risk, Financial risk, Time risk, Psychological risk, and security risk. Privacy risk is a frustrating thing in online shopping (Tran, 2020), referring to the potential risk of losing control over personal information when user information is used without their permission. Financial risk is a concern that arises from the exchange of financial information and related risks in a virtual web environment (Gangwar et al, 2015). In other words, financial risk refers to the possibility of losing money paid through an unsafe online payment portal, disclosure of financial information and passwords, and fraud resulting from the lack of a reliable and secure online payment infrastructure. Time risk, namely the potential loss in the form of lost time due to wrong purchasing decisions and time to search for products and purchases (Qalati et al., 2021). The risk of losing time when using an e-wallet can be in the form of delayed transactions because the application has complicated procedures, or the lack of application stability that causes transactions to fail and has to repeat steps from the beginning when using the e-wallet. Psychological risk, this risk refers to the anxiety and fear of users when using technology. The lack of ability to test a product or service causes anxiety and fear in users when shopping (Qalati et al., 2021). Security risk, which is the security risk that consumers feel about the possibility of becoming victims of crime (Qalati et al., 2021).

Consumers may feel risk and uncertainty when they first adopt an e-wallet, so there is a strong need to build trust to reduce perceived risk (Krisnawati et al., 2021). In their research, Im et al. (2008) and Lee (2009) wrote how perceived risk weakens perceived usefulness, and perceived ease of use, and consequently on the intention to use of e-wallet users. Perceived risk is one of the main reasons people reject or are reluctant to use technology. (Oktavia et al, 2024).

Hypothesis 1: There is an influence of Perceived Risk on perceived ease of use

Hypothesis 2: There is an influence of Perceived Risk on perceived usefulness.

Hypothesis 3: There is an influence of Perceived Risk on the intention to use e-wallet.

The two main constructs of TAM, perceived usefulness and perceived ease of use influence the user's intention to use a technology (Mutahar et al., 2018). Perceived ease of use is defined as the level of a person's belief that using a particular system will be free from effort, while perceived usefulness is defined as the level of a person's belief that using a particular system will improve their job performance (Davis, 1989). These two main fundamental constructs of TAM have been empirically confirmed to be significant as predictors of user intention to adopt different technology applications and cultural contexts (Faqih, 2016; Norzaidi et al., 2011; Tan et al., 2016; Thakur and Srivastava, 2013; Zolait, 2010).

Hypothesis 4: There is an influence of Perceived Ease of Use on intention to use

Hypothesis 5: There is an influence of Perceived usefulness on intention to use

Hypothesis 6: Perceived Ease of Use significantly mediates the influence of Perceived Risk on intention to use.

Hypothesis 7: Perceived usefulness significantly mediates the influence of Perceived Risk on intention to use.

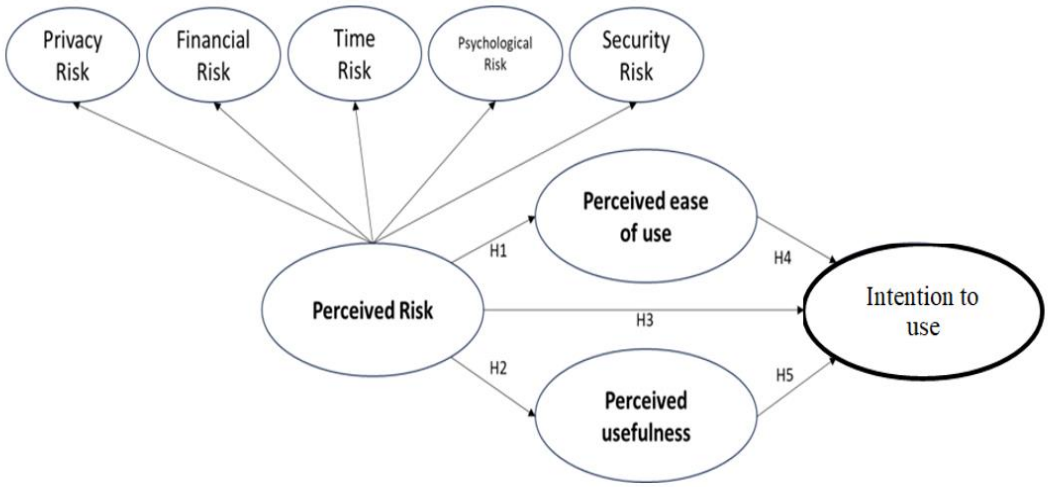


Figure 1 Research Model

Methods

The method used in this study is a quantitative approach, using a questionnaire to collect data. The questionnaire contains statements related to perceived usefulness, perceived ease of use, perceived risk, and intention which are measured using a 6-point Likert Scale from a scale of Strongly Agree to Strongly Disagree. The research model and research instruments were adapted from Mutahar et al. (2018).

The population of the study was users of the e-wallet application. The sample of this study was 120 respondents from various areas of Jabodetabek. The survey allowed researchers to obtain a large amount of information and support the validated model (Jones, Baxter, & Khanduja, 2013). Data processing used PLS-SEM, using the SmartPLS program. Researchers used purposive sampling where respondents were selected because they had the characteristics needed by researchers. These characteristics are status as residents domiciled in the Jabodetabek area, and using e-wallets. The independent variables in this study are perceived usefulness, perceived ease of use, and perceived risk. The dependent variable in this study is intention to use.

Results and Discussion

Characteristics of Respondents

Respondents with male gender were 61.1% (80 people), female gender was 38.9% (51 people). Respondents with unmarried status were 51.2% (64 people), respondents with married status were 48.8% (61 people). The largest number of respondents were domiciled in Jakarta at 66.4% (87 people), and the fewest respondents were from Depok at 3.8% (5 people). Respondents in this study were aged between 17 years and over 65 years. Most respondents were in the age range of 26-35 years at 52% (65 people). The second largest percentage of respondents were in the age range of 36-45 years at 16% (20 people) and in the age range of 46-55 at 14.4% (18 people). Respondents in the age range of 17-25 years were 12% (15 people), 56-65 years old were 4% (5 people), and over 65 years old were 1.6% (2 people).

The largest number of respondents had a Bachelor's degree of 88 people (70.4%), Master's degree of 22 people (17.6%), and Diploma of 15 people (12%). Respondents who work as Employees were 72.8% (91 people) and Entrepreneurs were 8.8% (11 people). Then other job categories were 10.4% (13 people), Housewives were 4.8% (6 people), and Students were 3.2% (4 people).

Respondents most often use the Gopay E-wallet application at 56.8% (71 people), followed by OVO at 27.2% (34 people), ShopeePay 10.4% (13 people), DANA 4.8% (6 people), and Link Aja 8% (1 person). Respondents who have used E-wallet between 3-5 years are 38.4% (48 people), more than 5 years are 32.8% (41 people), between 1-3 years are 24% (30 people), and less than 1 year 4.8% (6 people). Respondents most use E-wallet for cashless payments at shopping places 30.4% (38 people), while the least for purchasing vouchers (5.6%, 7 people), and paying taxes (1.6%, 2 people).

Descriptive Analysis of Variables

Based on descriptive statistical data for the Perceived Usefulness variable, the average mean of all items is 5.081. The highest mean is found in item PU3 "In general, I think E-Wallet is useful." which is 5.266. While the lowest mean is found in item PU1 "I think using E-wallet will allow me to do more shopping activities." which is 4.742. For the Perceived Ease of Use variable, the average mean of all items can be seen at 4.989. The highest mean is found in item PEU2 "Learning to use E-wallet is not difficult." which is 5.105. While the lowest mean is found in item PEU1 "I think the E-wallet application is easy to use compared to other payment tools." which is 4.823. Descriptive statistics of the Perceived Risk variable can be seen the average mean for the Privacy Risk dimension is 3.075. The average mean for the Financial Risk dimension is 2.815. The average mean for the Time Risk dimension is 4.457. The average mean for the Psychological Risk

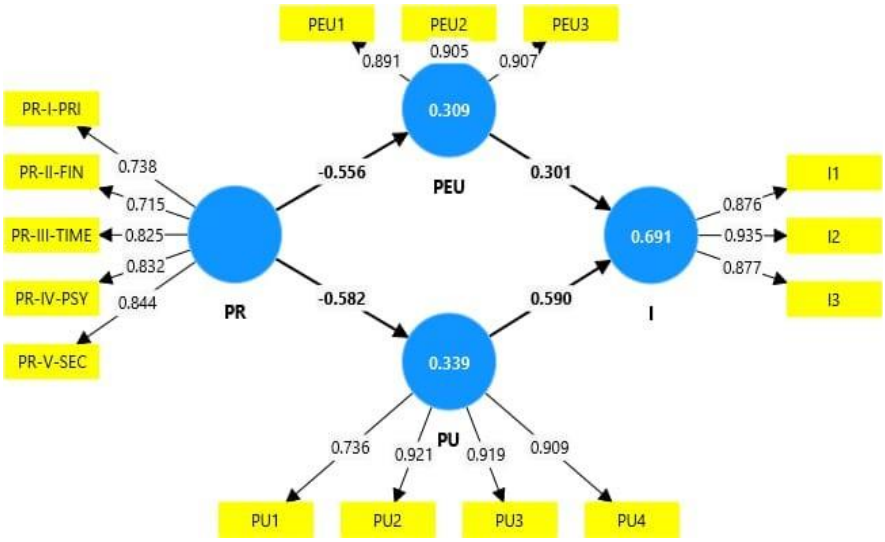
dimension is 4.714. The average mean for the Security Risk dimension is 3.707. The highest mean is in item PR10 "Using the E-wallet system makes me feel nervous." which is 4.815. While the lowest mean is in item PR5 "When using E-wallet services, there are financial risks (Example: the risk of passwords and financial information being spread, and the risk of fraud)." which is 2.677. Meanwhile, the descriptive statistics of the Intention to Use variable, can be seen that the average mean of all items is 4.973. The highest mean is in item I2 "I will use E-wallet for my transaction needs" which is 5.121. While the lowest mean is in item I3 "If I have access to the E-wallet application, I want to use it as much as possible" which is 4.79.

Outer Loading Factor Analysis

Starting with conducting an Outer Loading Factor First Order analysis of the perceived risk dimensions.

- The Privacy Risk dimension has items that work according to its measurement model, with a loading factor correlation value greater than 0.7 with item "When using the E-Wallet application, personal information may be stolen by others." has the highest loading factor value (0.902).
- The Financial Risk dimension has items that work according to its measurement model, with a loading factor correlation value greater than 0.7 with item "When using the E-wallet application, I may lose money because my account information is hacked." has the highest loading factor value (0.938).
- The Time Risk dimension has items that work according to its measurement model, with a loading factor correlation value greater than 0.7 with item "In my opinion, the E-wallet application is slow and causes loss of time, due to several problems with its operating system." has the highest loading factor value (0.846).
- The Psychological Risk dimension has items that work according to its measurement model, with a loading factor correlation value greater than 0.7 with item "Using the E-wallet system makes me feel anxious." has the highest loading factor value (0.913).
- The Security Risk dimension has items that work according to its measurement model, with a loading factor correlation value greater than 0.7 with item "I am worried about using E-wallet because other people might be able to access my account." has the highest loading factor value (0.861).

Path Analysis Second Order (Row PR-I-PRI to PR-V-SEC) was conducted after obtaining the results of the latent variable score perceived risk consisting of privacy risk (PR-I-PRI), financial risk (PR-II-FIN), time risk (PR-III–TIME), psychological risk (PR-IV-PSY), and security risk (PR-V-SEC). The Perceived Risk construct has items that work according to its measurement model, with a loading factor correlation value greater than 0.7 with the PR-V-SEC dimension on Security Risk having the highest loading factor value (0.844).



Source: Research results, processed with Smart PLS 4.0, 2024

Figure 2. Path Diagram SmartPLS Second Order

Reliability and Validity Test

The results of the reliability test in this study were measured through two criteria, namely the composite reliability value and Cronbach's alpha. The use of Cronbach's alpha tends to produce lower variable reliability values than composite reliability, so it is recommended to use composite reliability (Haryono, 2017). The research construct can be said to be reliable because the Cronbach's alpha and composite reliability can be seen to be greater than 0.7.

The results of the validity test used the average variance extracted (AVE) value with a limit value above 0.50. All variables have an AVE value above 0.50. This means that all indicators and variables meet the validity standards.

Table 1 Reliability and Validity Test

	Cronbach's alpha	Composite reliability	AVE
PU	0,895	0,928	0,765
PEU	0,884	0,928	0,812
PR-I-PRI	0,825	0,895	0,740
PR-II-FIN	0,851	0,930	0,870
PR-III-TIME	0,722	0,844	0,643
PR-IV-PSY	0,764	0,894	0,808
PR-V-SEC	0,773	0,869	0,688
PR	0,857	0,894	0,628
I	0,877	0,924	0,803

Evaluation of discriminant validity at the variable level using the fornell-larcker criterion and cross loading. The first test stage is to conduct a test with the fornell-larcker criterion which is a traditional method and is used by comparing the square root value of the Average Variance Extracted (AVE) of each construct with the correlation between other constructs. Comparison of the AVE root values shows that each of these values is greater than the correlation between other variables, Diagonal Value = AVE Root, Other values = AVE Root Correlation I (0.896) is higher than the correlation I with PEU (0.72), correlation I with PR (-0.547), and correlation I with PU (0.804). The cross-loading value in each variable construct has met the requirements, namely having a value greater than 0.70 and greater than other variables. so that it can be concluded that all latent variables in the study have good construct validity and discriminant validity.

Structural Model Test

The requirement used is an SRMR value below 0.08 indicating a fit model, while an SRMR value between 0.08 and 0.10 is still acceptable (Yamin, 2021). Based on the calculation results, it is known that the SRMR value <0.10 is 0.086 <0.10, thus the results of the model testing in this study can be stated to have good goodness of fit or Model Fit.

Goodness of Fit is used to assess the feasibility of a model with data, to test a model can be measured using the Normed Fit Index (NFI) value. According to Wijanto and Heri (2015) the NFI value starting from 0-1 is derived from the comparison between the hypothesized model and a certain independent model, a model has a high fit if the value is close to 1. Based on table 4F.1 the Normal Fit Index (NFI) is 0.800 approaching 1 which means it is feasible/in accordance with the model being built.

Q-Square predictive relevance for structural models, measures how well the conservation value is generated by the model and also its parameter estimates. Q-square on the dependent variable (I) is 0.284. By looking at this value, it can be concluded that this study has a good observation value because the Q-square value> 0 (zero) is 0.284 (Hair, 2017).

The R-square for the perceived usefulness variable is 0.339 which can be interpreted that the magnitude of the influence of the perceived usefulness variable on intention is 33.9%, classified as a moderate influence according to Oktavia et al., (2024). While the R-square value of perceived ease of use of 0.309 or 30.9% is classified as a moderate influence.

The influence of the perceived ease of use (PEU) variable on intention to use (I) at the structural level is classified as approaching Moderate (F-square = 0.146) equal to 0.15. The influence of the perceived risk (PR) variable on perceived ease of use (PEU) at the structural level is classified as High (F-square = 0.448) greater than 0.35. The influence of the perceived risk (PR) variable on perceived usefulness (PU) at the structural level is classified as High (F-square = 0.513) greater than 0.35. The influence of the perceived usefulness (PU) variable on intention to use (I) at the structural level is classified as High (F-square = 0.560) greater than 0.35.

Table 2 Direct Effect, Path Coefficient

	T-statistics	Original sample	P values	Hypothesis Test Results
PR -> PEU	6,860	-0,556	0,000	H1 accepted
PR -> PU	6,696	-0,582	0,000	H2 accepted
PR -> I	6,132	-0,511	0,000	H3 accepted
PEU -> I	3,590	0,301	0,000	H4 accepted
PU -> I	7,097	0,590	0,000	H5 accepted

The perceived risk on perceived ease of use has a significant negative effect, this can be seen from the P value which is 0.000 <0.05 (t-statistics value of 6.860> 1.96). The negative direction of the influence of perceived risk is seen from the original sample value of -0.556 which indicates that the relationship between perceived risk and perceived ease of use is negative. Thus, the first hypothesis is accepted.

Perceived risk has a significant negative effect on perceived usefulness. This can be seen from the P value which is 0.000 <0.05 (t-statistics value of 6.696> 1.96). The negative direction of the influence of perceived

risk is seen from the original sample value of -0.582 which indicates that the direction of the relationship between perceived risk and perceived usefulness is negative. Thus, the second hypothesis is accepted.

The hypothesis of perceived ease of use (PEU) influences the intention to use E-wallet (I). The influence of perceived ease of use on intention to use is significant, as seen from the P value of 0.000 <0.05 (t-statistics value = 7.097> 1.96). The positive direction of the influence of perceived ease of use can be seen from the original sample value, which is positive at 0.301, which indicates that the direction of the relationship between perceived ease of use and intention to use is positive. Thus, the third hypothesis is accepted. The hypothesis of perceived usefulness (PU) has an influence on intention to use E-wallet (I). The influence of Perceived usefulness on intention to use is significant, as seen from the P value of 0.00 <0.05 (t-statistics value = 3.590> 1.96). The positive direction of the influence of perceived usefulness can be seen from the original sample value, which is positive at 0.590, which indicates that the direction of the relationship between perceived usefulness and intention to use is positive. Thus, the fourth hypothesis is accepted.

Table 3 Indirect Effect

	T-statistics	Original sample	P values	Hypothesis Test Results
PR -> PEU -> I	3,332	-0,167	0,001	H6 accepted
PR -> PU -> I	4,535	-0,344	0,000	H7 accepted

The indirect effect of perceived risk on intention to use through the mediation of the variable perceived ease of use (PEU) as a significant mediator can be seen from the P value of 0.001 <0.05 (t statistics= 3.332). The negative direction of the influence of perceived risk can be seen from the negative original sample value (-0.167) which indicates that the direction of the relationship between the variable perceived risk on intention to use through the mediation of the variable perceived ease of use is significantly negative.

The indirect effect of perceived risk on intention to use with the mediation of the variable perceived usefulness (PU) as a significant mediator can be seen from the P value of 0.000 <0.05 (t statistics = 4.535). The negative direction of the influence of perceived risk can be seen from the negative original sample value (-0.344) which indicates that the direction of the relationship between the variable perceived risk on intention to use through the mediation of the variable perceived usefulness (PU) is significantly negative.

From the total indirect effect test (PR on I), the influence of perceived risk on intention to use is significant based on the P value of 0.000 <0.05 (t statistics = 6.132). The negative direction of the influence of perceived risk is seen from the negative original sample value (-0.511) which indicates that the total direction of the relationship between the perceived risk (PR) variable and intention to use (I) through the mediating variable is significantly negative. So, the higher the value of the perceived risk variable, the lower the value of the intention to use variable.

The results of the first hypothesis test obtained an original sample value of -0.556 and a significance value of 0.000. This shows that Perceived Risk (PR) has a significant negative effect on Perceived Ease of Use (PEU) because the significance value of 0.000 is smaller than 0.05. This is in line with research conducted by Im et al. (2008) and Lee (2009) which revealed that perceived risk can weaken perceived ease of use.

The results of the second hypothesis test obtained an original sample value of -0.582 and a significance value of 0.000. This shows that Perceived Risk (PR) has a significant negative effect on Perceived Usefulness (PU) because the significance value is 0.000 which is smaller than 0.05. This is in line with research conducted by Im et al. (2008) and Lee (2009) which revealed that perceived risk can weaken perceived usefulness.

The results of the third hypothesis test obtained an original sample value of -0.511 and a significance value of 0.000. This shows that Perceived Risk (PR) has a significant negative effect on Intention to Use (I) because the significance value is 0.000 which is smaller than 0.05. This is in line with research conducted by Almira (2022) which revealed that perceived risk can weaken intention.

The results of the fourth hypothesis test obtained an original sample value of 0.301 and a significance value of 0.000. This shows that Perceived Ease of Use (PEU) has a significant positive effect on Intention to use (I). The significance value of 0.000 is smaller than 0.05. The results of this study are in line with Amin et al. (2008), Kim et al. (2007), Krogstie (2012), and Krisnawati et al. (2021) which statistically show that perceived ease of use has a positive effect on intention to use. The results of the fifth hypothesis test obtained an original sample value of 0.590 and a significance value of 0.000. This shows that Perceived Usefulness (PU) has a significant positive effect on Intention to use (I). The significance value of 0.000 is smaller than 0.05. The results of this study are in line with Amin et al. (2008), Kim et al. (2007), Krogstie (2012), and Krisnawati et al. (2021) which statistically show that perceived usefulness has a positive effect on intention to use. The implications of this study that need to be considered by e-wallet service providers that influence users in Jabodetabek to use e-wallets are security risk and application complexity in carrying out digital transactions. It is very important to ensure that e-wallet services are more secure (such as financially, privacy), and are promoted as services that are easier to transact.

Conclusion

Based on the results of data analysis and research that has been conducted, the following conclusions can be drawn from the research on the influence of Perceived Usefulness, Perceived Ease of Use, and Perceived Risk on Intention to Use in Jabodetabek:

1. Perceived risk has a negative and significant effect on perceived ease of use of e-wallet users. This means that the higher the perceived risk, the lower the perceived ease of use of e-wallets. Conversely, the lower the perceived risk, the higher the perceived ease of use of e-wallets.
2. Perceived risk has a negative and significant effect on perceived usefulness of e-wallet users. This means that the higher the perceived risk, the lower the perceived usefulness of e-wallets. Conversely, the lower the perceived risk, the higher the perceived usefulness of e-wallets.
3. Perceived Ease of Use has a positive and significant effect on intention to use E-wallets. This means that the higher the perceived ease of use of e-wallets, the higher the intention to use e-wallets. On the contrary, the lower the perceived ease of use of e-wallet, the lower the intention to use e-wallet for users.
4. Perceived usefulness has a positive and significant effect on the intention to use e-wallet. This means that the higher the perceived usefulness of e-wallet, the higher the intention to use e-wallet. On the contrary, the lower the perceived usefulness of e-wallet, the lower the intention to use e-wallet for users.

The findings of this study indicate that service providers should concentrate more on risk assessment, usability, and ease of use to encourage wider use of e-wallet. Marketers need to ensure that e-wallet services are safer (such as financially, privacy), and are promoted as easier and more useful than using traditional cash transactions. The results of this study are expected to be significant recommendations that will be very helpful for e-wallet service providers and also useful for the government sector to know the things that are relatively important to remember when designing strategies to create and promote online services so that they are more widely used.

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