Bukti Korespondensi

[jti] Editor Decision Inbox ×

Jurnal Teknik Industri <jurnal_ti@petra.ac.id>
to me, Michelle ▾

Fri, Nov 12, 2021, 11:39 AM

Dear Nony Kezia Marchyta, Michelle Olivia:

Please kindly find the feedback of your manuscript entitled, "The Influence of Perceived Ease of Use and Perceived Usefulness on E-Wallet Continuance Intention: Intervening Role of Customer Satisfaction" in this email.

Reviewer A:

1. it is necessary to strengthen the English language through proofreading

2. Need to add a literature review

3. Need the relationship between the concepts of variables direct and intervening for 7 Hypothesis.

4. Rp cange to IDR

5. Add discussion of each hypothesis by involving indicators/measurement items

6. Make sure the references are written correctly

Recommendation: Major Revisions Required

Reviewer B:

The topic discussed is not really new, the authors need to show the contribution of this study. It is not seen in the introduction part. Is there any problem that comes up from using the e-wallet so then it is important to be analysed?

The authors need to add the underpinning theory that can underline the hypotheses development. The authors may use the Planned behaviour or technology acceptance model or any other theories that are relevant to the relationship of each variable. It is also important to explain or just mention the indicators in the discussion or methodology part.

There is too much statistical discussion. It is not balanced by the practical discussion (the implication). The discussion presented is too general and shallow, so it is not interesting for the reader. There is no specific information that makes this study provide added value in the topic of customer satisfaction and perceptions about the ease and benefits of using the e-wallet.

The authors need to follow the template of this journal, especially the citation style.

Recommendation: Major Revisions Required

Please revised your manuscript according to the reviewers feedback. In the revised version please, highlighted any changes that you make, and enclosed the answers to the reviewers feedback in the separated docx.

We wait the revised version up to 12.01.22

Sincerely yours

Siana Halim

2 Attachments · Scanned by Gmail ⓘ

W B-24077-Article T...

W C-24077-37339-1...

Nony Kezia Marchyta <nonykezia@petra.ac.id>
to Jurnal, bcc: nonykezia ▾

Tue, Dec 7, 2021, 8:00 AM

Dear Miss Siana Halim,

Here attached the revised version and turnitin result.
Thank you.

Best regards,
Nony Kezia Marchyta

2 Attachments · Scanned by Gmail ⓘ

The Influence of Perceived Ease
PDF JTI_Turnitin Resul...

W JTI_The Influence...

Jurnal Teknik Industri <jurnal_ti@petra.ac.id>
to me

Tue, Dec 7, 2021, 8:13AM

Dear Ibu Marchyta,

Please upload your revised version into JTI url, and please also enclosed the answers to the reviewer comments in the separate file.

thank you
Siana Halim
Editor in chief JTI

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Siana Halim
Editor in chief
Jurnal Teknik Industri-UK. Petra
http://jurnalindustri.petra.ac.id/

Nony Kezia Marchyta <nonykezia@petra.ac.id>
to Jurnal

Wed, Dec 8, 2021, 5:34PM

Dear Miss Siana Halim,

Thank you for the information.
I have uploaded the revised version, Turnitin result, and the answers to the reviewer comments into JTI url.

Best regards,
Nony Kezia Marchyta

...

[jti] Editor Decision   Inbox ×

Jurnal Teknik Industri <jurnal_ti@petra.ac.id>
to me, Michelle

Wed, Jan 5, 2022, 12:11PM

Dear Nony Kezia Marchyta, Michelle Olivia:

The reviewers of your manuscript entitled, "The Influence of Perceived Ease of Use and Perceived Usefulness on E-Wallet Continuance Intention: Intervening Role of Customer Satisfaction", agree with the revised version of this manuscript.
A minor note:

Dear Authors

This manuscript has been improved. I just want to stress on the references. It would be much better if the authors can add more newest literature (around 2018-2021) for the references.

This manuscript will be published in JTI, June 2022. The in-press will be published in Februari, after you added some newest literature as it is suggested by the reviewer.

Thank you for publishing you valuable work in JTI.

Sincerely yours

Siana Halim

Jurnal Teknik Industri
Published by: Institute of Research and Community Outreach Petra Christian University
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Nony Kezia Marchyta <nonykezia@petra.ac.id>
to Jurnal

Thu, Jan 6, 2022, 8:18AM

Dear Bu Siana Halim,

Thank you for the response.
I will add the reference and send it back to you as soon as possible.

Best regards,
Nony Kezia Marchyta

Virus-free. www.avast.com

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[↩ Reply] [→ Forward]

Thank you for the input that has been given so as to further improve the writing of this journal. Here is a response to suggestions and feedback from reviewers.

C-JTI_NKM_Jun22_Revised1_Minor Note

This manuscript has been improved. I just want to stress on the references. It would be much better if the authors can add more newest literature (around 2018-2021) for the references.

Answer: based on the reviewer's feedback, we add 5 newest literatures (around 2018-2021) for the references.

1. Aji, H.M., Berakon, I., and Husin, M.Md., COVID-19 and E-Wallet Usage Intention: A Multigroup Analysis Between Indonesia and Malaysia, Cogent Business & Management, 7(1), 2020, pp. 1–16.
2. Moriuchi, E., Okay, Google!: An Empirical Study on Voice Assistants on Consumer Engagement and Loyalty, *Psychology & Marketing*, 36(5), 2019, pp. 489–501.
3. Moriuchi, E. and Takahashi, I., An Empirical Investigation of The Factors Motivating Japanese Repeat Consumer to Review Their Shopping Experiences, *Journal of Business Research*, 82, 2018, pp. 381–390.
4. Nasution, L.N., Ramli, Sadalia, I., and Ruslan, D, How Fintech Conditions in Indonesia During The Covid-19 Pandemic?, *International Proceeding of Law & Economic*, 2020, pp. 46–50.
5. Trisnowati, Y., Muditomo, A., Manalu, E.P.S., Kesuma, Z., Adriana, D., and Dwiyani, R., The COVID-19 Pandemic's Impact on Indonesia's Electronic Retail Payment Transactions, *International Conference on Information Management and Technology (ICIMTech)*, 2020.

Reviewer A:

1. it is necessary to strengthen the English language through proofreading

Answer: based on the reviewer's feedback, we revised the English language on this version.

2. Need to add a literature review

Answer: based on reviewer's feedback, we have remove the literature that wasn't relevant to the study and replaced it with relevant one. We also add several new literatures, the additional literatures are number 2, 3, 10, and 22 on the reference list.

3. Need the relationship between the concepts of variables direct and intervening for 7 Hypothesis.

Answer: we have restructure the paragraph, so that the paragraph about the relation between variable that lead to the construction of each hypothesis is now directly above each hypothesis.

4. Rp cange to IDR

Answer: Rp has been changed to IDR based on the reviewer's feedback.

5. Add discussion of each hypothesis by involving indicators/measurement items

Answer: done.

6. Make sure the references are written correctly

Answer: we have change the quotation style and reference according to JTI standard.

Reviewer B:

The topic discussed is not really new, the authors need to show the contribution of this study. It is not seen in the introduction part. Is there any problem that comes up from using the e-wallet so then it is important to be analysed?

Answer: we have edited the introduction to implore it further. The topic was chosen because Covid-19 put increased necessity for e-wallet. Previous studies had studied e-wallet but not many in developing countries, with some research have conflicting results.

The authors need to add the underpinning theory that can underline the hypotheses development. The authors may use the Planned behaviour or technology acceptance model or any other theories that are

relevant to the relationship of each variable. It is also important to explain or just mention the indicators in the discussion or methodology part.

Answer: perceived ease of use and perceived usefulness are based on TAM. We have implored it further in the paragraph.

There is too much statistical discussion. It is not balanced by the practical discussion (the implication). The discussion presented is too general and shallow, so it is not interesting for the reader. There is no specific information that makes this study provide added value in the topic of customer satisfaction and perceptions about the ease and benefits of using the e-wallet.

Answer: we have added the discussion of implications of this research for readers, especially for e-wallet providers in entering the Indonesian market.

B-24077 _ Reviewer Comments at Ms.Word

It is not relevant to compare the e-ticket with e-money

Answer: we have remove the literature about e-ticket and change it with the one with e-wallet.

This part is too monotone, It would be better if the authors can inform the indicators used.

Another option is that the indicators can be shown while providing the loading factors (together with the cross loading factors) in one table

Answer: we have moved the indicators, loading factor, AVE, R-square into a table.

Instead of presenting the results in the sentences paragraph, it would be nice if it is in the table. Authors can save the number of words for the managerial implication in explaining the results (indicator, AVE, loading factor, R square)

Answer: we have moved the indicators, loading factor, AVE, R-square into a table.

C-24077_ Reviewer Comments at Ms.Word

Please follow the JTI citation sytle

Answer: done.

A server-based e-wallet is easier and safer to use than a chip-based e-wallet. The customer only needs to install an e-wallet application, and they can already use it for various transactions (Reza, 2020)

Answer: done.

The phenomenon of the rise of e-wallet in Indonesia is caused by their ease of use, such as fast top-up and safety, and because of a lot of their cashback and vouchers

Answer: done.

The competition among e-wallet providers means the provider needs to develop a system that encourages their customers to use their platform continually

Answer: done.

Literature review, relationship between concepts

Answer: done.

IDR

Answer: done.

Please follow the JTI references style

Answer: done.

The Influence of Perceived Ease of Use and Perceived Usefulness on E-Wallet Continuance Intention: Intervening Role of Customer Satisfaction

ABSTRACT

The developments of information technology and the advent of new normal in Indonesia had transformed how the transaction was conducted, increasing the importance of e-wallet. This study aimed to analyze the effect of perceived ease of use, perceived usefulness, and customer satisfaction on e-wallet continuance intention. This study focused on customers of e-wallet in Indonesia. This research was quantitative research with data collection used the purposive sampling technique. This sampling was conducted by distributing questionnaires to 97 e-wallet customers in Indonesia, with eight questionnaires being rejected due to unmet criteria. Partial Least Square Path Modeling (PLSPM) was used to test the hypotheses. The study found that perceived ease of use had a direct positive influence on continuance intention as well as an indirect positive influence on it through customer satisfaction as an intervening variable, perceived enjoyment did not directly influence continuance intention but had indirect positive influence on it through customer satisfaction as an intervening variable, and customer satisfaction positively influenced continuance intention.

Keywords: Perceived ease of use, perceived usefulness, customer satisfaction, continuance intention.

Introduction

Indonesia has entered the new normal era where vitality, uncertainty, complexity, and ambiguity are rising across the social spectrum, leading to changes that make many sectors need to be supported by internet technology. According to Kemp [17], in 2020, internet users in Indonesia had reached 175.4 million people, equal to 65.5% of the population, it increased by around 17% or 25 million from 2019. The development and innovation of smartphone technology and its widespread use make them a primary public need. One of the innovations is the e-wallet which can be used as a cashless transactional tool (Wijayanthi [28]).

E-wallets first came in Indonesia in the form of chips or cards such as e-toll, which can be used to pay on highways, supermarts, minimarts, etc. Innovations in e-wallet lead to a new form that is server-based instead of chip-based, this method utilizes internet media and can be used for online or offline transactions using QR codes (Amoroso and Magnier-Watanabe [5]).

There are already more than fifty e-wallets in Indonesia, among them are Shopeepay, Ovo, Gopay, LinkAja, Jenius, Dana, Go Mobile, etc, it relates to the campaign to promote e-wallets by the provider, as well as government support to bring Indonesia into cashless society (Devita [10]). According to the survey, when paying for an online transaction, 30% use bank transfer, 26% use e-wallet, and 25% use cash on delivery (Devita [10]). The rise of e-wallet in Indonesia is caused by their ease of use such as fast top-up and because of a lot of their cashback and vouchers.

In the middle of the COVID-19 pandemic, the physical distancing policy proclaimed by the World Health Organization (WHO) encourages consumers to make contactless activities, including payment transactions (Aji *et al*. [1]). In line with this, Aji *et al*. [1] found that perceived COVID risk directly affected the intention of e-wallet use during the COVID-19 pandemic. Furthermore, Trisnowati *et al*. [27] found an increase in the use of electronic money during the early stage of the pandemic with the majority of it using e-wallets. However, Nasution *et al*. [23] found that even though there was an increase during the early stage of the pandemic, it was soon followed by a decrease in electronic money transactions compared to an increase in nominal transactions. One possible reason is due to the use of financial technology by limited communities in certain areas and inadequate facilities (Nasution *et*

al. [23]). It shows that there is a need to research variables that encourage or hinder the intention of e-wallet use in Indonesia.

The competition among e-wallet provider means the provider needs to develop a system that encourages their customer to use their platform continually. Continuance intention on the cellular financial application is defined as an individual's intention to repeatedly use the application (Amoroso and Lim [4]). Limayem *et al.* [18] define continuance intention as post-adoption behavior. To make their customer have continuance intention, e-wallet providers need to ensure that their customers can accept their technology.

Phuong *et al.* [24] found that customer satisfaction intervenes the relation between both perceived ease of use and perceived usability with continuance intention on the e-wallet platform in Vietnam. However, a study from Juniwati [16] did not find an intervening effect of customer satisfaction toward the relationship between perceived ease of use and continuance intention on online shopping platforms in Indonesia. Rantung *et al.* [25] didn't find a significant influence from perceived usefulness toward continuance intention on e-wallet in Manado while Amin *et al.* [3] didn't significantly influence perceived ease of use toward intention to use e-wallet in Bangladesh.

Perceived ease of use and usefulness had been previously researched as the antecedent of continuance intention with customer satisfaction as mediating variable. However, those researches still result in conflicting results. Conflicting results from previous studies means that this topic still needs further research, especially as those results come from Indonesia and other developing country. This study aims to analyze the effect of perceived ease of use, perceived usefulness, and customer satisfaction on e-wallet continuance intention in Indonesia.

One of the prominent theories in studying digital platforms is Technology Acceptance Model (TAM). Although TAM was first introduced and applied in the context of technology, particularly in the field of information systems, it is now widely applied to other disciplines including marketing, e-commerce (Moriuchi and Takahashi [21]), and repeat online reviews (Moriuchi [20]). According to TAM, there are two determinants, perceived ease of use and perceived usefulness (Davis [9]). Perceived usefulness and perceived ease of use influence customer satisfaction (Phuong *et al.* [24]). Customers who feel that using an e-wallet is more accessible will feel satisfied with the e-wallet platform. According to Shang and Wu [26], customers with high satisfaction rates usually will continue to use the platform.

Perceived ease of use is the degree of belief of a person that using information technology will reduce effort and make works easier (Davis [9]). Moslehpour *et al.* [22] said that perceived ease of use is one of the important elements of technology as society increasingly likes simpler and easier things that won't reduce productivity, so the more straightforward to use, the better the acceptance from the community. According to Chi [8], perceived ease of use reflects the effort felt by the user when they use information technology. According to Hubert *et al.* [14], indicators of perceived ease of use are ease of learning, ease of meeting wish, ease of becoming skillful, and ease of transaction.

Perceived usefulness can be defined as how much an individual believes that the technology increases their productivity in doing transactions (Davis [9]). Someone who feels the benefit of information technology has a higher chance to accept that information technology (Moslehpour *et al.* [22]). Meanwhile, according to Chi [8], perceived usefulness refers to how much an individual believes that technology can increase their performance. According to Chi [8], indicators of perceived usefulness are performance improvement, productivity improvement, convenience, and effectiveness enhancement.

Customer satisfaction is defined as the portion of customer out of all customers who has satisfying experience with a company, product, or service (Fungai [11]). According to Mensah and Mensah [19], customer satisfaction is a rating from customers on how a product or service results in satisfying consumption. In the context of the application, customer satisfaction is the state of satisfaction which

comes from application's performance that meets expectation (Phuong *et al.* [24]. Customer satisfaction is an evaluation based on the user's first time experience with the service, this evaluation can be a positive feeling, satisfaction, indifference, or dissatisfaction (Hsu and Lin [13]). In the context of e-wallet, customer satisfaction is a positive experience that e-wallet users have from the service provided (Amin *et al.* [2]). The indicators of customer satisfaction are contentment level, good performance, conformity to expectation, and pleasing experience (Amin *et al.* [2]).

Continuance intention is the next step of acceptance. A customer forms their opinion after the first time they use the system, if they feel its use, it will lead to satisfaction with the system's service which causes the customer to want to continue using the system, (Bhattacherjee [7]). According to Amoroso and Lim [4], continuance intention refers to the level of intent an individual has to keep doing a certain behavior. In the context of e-wallet, Shang and Wu [26] defined continuance intention as the user's intent to keep using the e-wallet. Indicators of continuance intention are returned intention level, usage intensity, and recommendation intensity (Shang and Wu [26]).

Phuong *et al.* [24], in their study, explained that perceived ease of use significantly influences continuance intention, when the level of perceived ease of use is high, the user tends to use the technology again, on the other hand, if the level is low, the user avoids using it again. Shang and Wu [26] explained that perceived ease of use influences continuance intention positively, if the user finds that the mobile application is easy to use, they tend to continue to use the mobile application. However, Amin *et al.* [3] found that perceived ease of use doesn't influence continuance intention on an e-wallet in Bangladesh.
H₁: Perceived ease of use influences continuance intention.

The study by Hamid *et al.* [12] shows that perceived usefulness significantly influences continuance intention, if technology gives the benefit that increases productivity and time efficiency, it will lead to continuance intention. This is supported by the study by Phuong *et al.* [24] on e-wallet customer in Vietnam, e-wallet that is useful to the customer tend to have better continuance intention. However, these studies are not supported by Rantung *et al.* [25] who studied e-wallet in Indonesia. They found that perceived usefulness does not significantly influence continuance intention.
H₂: Perceived usefulness influences continuance intention.

Phuong *et al.* [24] establish that perceived ease of use significantly affects customer satisfaction, information technology that only needs minimal effort to use will be more easily accepted by the user and create satisfaction. Phuong *et al.* [24] also argue that perceived ease of use is a defining factor of customer satisfaction in the context of technology application. Ashfaq *et al.* [6] found different result, in their study on online shopping, their study shows that perceived ease of use do not significantly impact customer satisfaction as there are other factors such as expectation and enjoyment that might interfere with it. A similar result is displayed in the study by Juniwati [16], perceived ease of use doesn't significantly relate to customer satisfaction in online shopping.
H₃: Perceived ease of use influences customer satisfaction.

Phuong *et al.* [24] found that perceived usefulness significantly influences customer satisfaction, the benefit that an individual receives when using technology will lead to satisfaction, the benefit can be in the form of productivity increase or efficiency whether financial or non-financial. The study by Amin *et al.* [2] also supports this result, perceived usefulness reflects the mind of the user, recognizing that the technology is useful and will lead to satisfaction in using the technology. However, Jaiswal and Singh [15] found different results, website usability does not significantly influence customer satisfaction in e-shopping.
H₄: Perceived usefulness influences customer satisfaction.

In their study, Shang and Wu [26] conclude that customer satisfaction significantly influences continuance intention, technology users who are satisfied with the technology will develop a positive

attitude toward the technology and continue using it. Phuong *et al.* [24] also found that customers who feel satisfied with the performance of e-wallet have the intention to continually use the e-wallet. However, those findings are different from the research of Juniwati [16] which found that customer satisfaction does not significantly influence continuance intention in online shopping.
H₅: Customer satisfaction influences continuance intention.

In their study, Phuong *et al.* [24] found that perceived ease of use indirectly influences continuance intention with customer satisfaction as an intervening variable, easiness level of technology makes the user satisfied and tend to use the technology again. Similarly, Shang and Wu [26] also found that perceived ease of use influences continuance intention through customer satisfaction, if a technology only requires minimal effort to be used, the user will be more readily accept it and create satisfaction, this satisfaction increases the potential of using the technology continually. On the contrary, Juniwati [16] did not find any influence of perceived ease of use toward continuance intention through customer satisfaction.
H₆: Perceived ease of use indirectly influences continuance intention through customer satisfaction.

In their study, Phuong *et al.* [24] found that perceived usefulness has an indirect effect on continuance intention with customer satisfaction as an intervening variable, the benefit the user gets from using mobile application leads to satisfaction which increases the intention to use the technology application again. Similarly, Shang and Wu [26] also found that perceived usefulness significantly influences continuance intention through customer satisfaction, if the user thinks that the technology is beneficial for them, they will feel satisfied, this satisfaction increases the potential of using the technology continually. However, Jaiswal and Singh [15] did not find any significant influence from perceived usefulness to customer satisfaction while Juniwati [16] did not find a significant effect of customer satisfaction towards continuance intention that is necessary for customer satisfaction to become the intervening variable in the relationship between perceived usefulness and continuance intention.
H₇: Perceived usefulness indirectly influences continuance intention through customer satisfaction.
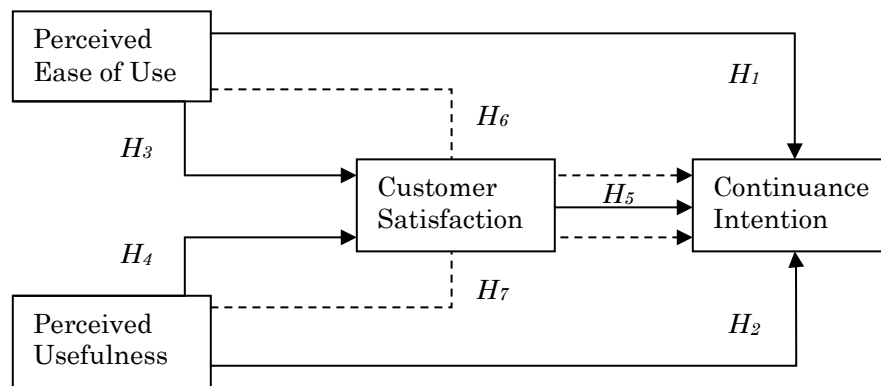

Figure 1. Literature review of relationship between concepts
Source: Amin *et al.* [2], Chi [8], Hubert *et al.* [14], Shang and Wu [26]

Based on previous studies, the hypothesis as shown in Figure 1 are as follow:
H₁: Perceived ease of use influences continuance intention
H₂: Perceived usefulness influences continuance intention
H₃: Perceived ease of use influences customer satisfaction
H₄: Perceived usefulness influences customer satisfaction
H₅: Customer satisfaction influences continuance intention
H₆: Perceived ease of use indirectly influences continuance intention through customer satisfaction
H₇: Perceived usefulness indirectly influences continuance intention through customer satisfaction

Methods

This study is a quantitative research that uses statistical numbers in processing and collecting data, this quantitative research uses an explanative method with a causal relationship. The population of this study is e-wallet users in Indonesia, moreover, the respondent must be above 17 years old, have an e-wallet account, and have used it at least twice in the last three months. Purposive sampling with a questionnaire was used to collect data in this study with the total number of questionnaires returned is 97 but only 89 meet the respondent criteria. The data was analyzed using PLSPM (Partial Least Square Path Modeling) to answer the research hypotheses.

The questionnaire contains questions regarding respondent profiles and questions regarding the research indicators. Indicators of perceived ease of use are adapted from the study of Hubert *et al*. [14], indicators of perceived usefulness are adapted from the study of Chi [8], indicators of customer satisfaction are adapted from the study of Amin *et al*. [2], while indicator of continuance intention is adapted from the study of Shang and Wu [26]. All indicators were measured with a Likert scale ranging from 1 to 5.

Result and Discussion

Table 1 shows respondent profile in this research.

Table 1. Respondent Profile

E-Wallet Usage Frequency	Number of Respondent	Percentage (%)
2 to 6 times	22	24.7
6 to 10 times	45	50.6
11 to 15 times	9	10.1
>15 times	13	14.6
Total	**89**	**100**
Age	**Number of Respondent**	**Percentage (%)**
18 to 23 years old	39	43.8
24 to 30 years old	39	43.8
31 to 37 years old	11	12.4
Total	**89**	**100**
E-Wallet Application	**Frequency Usage**	**Percentage (%)**
Gopay	55	29.1
Ovo	62	32.8
Dana	11	5.8
Shopeepay	54	28.6
LinkAja	7	3.7
Total	**189**	**100**
Average Top Up Nominal	**Number of Respondent**	**Percentage (%)**
Under 50.000 IDR	9	10.1
Between 50.000 IDR and 149.999 IDR	59	66.3
Between 150.000 IDR and 249.999 IDR	14	15.7
Between 250.000 IDR and 349.999 IDR	2	2.2
350.000 IDR or above	5	5.6
Total	**89**	**100**

Average Transaction Nominal	Number of Respondent	Percentage (%)
Under 50.000 IDR	16	18
Between 50.000 IDR and 149.999 IDR	62	69.7
Between 150.000 IDR and 249.999 IDR	6	6.7
Between 250.000 IDR and 349.999 IDR	5	5.6
350.000 IDR or above	0	0
Total	**89**	**100**
Reason Using E-Wallet	**Number of Respondent**	**Percentage (%)**
Practicality	89	47.1
Safety	55	29.1
Cashback or promotion	45	23.8
Total	**189**	**100**

Source: Data processed, 2021

The result from respondents that meet the criteria shows that in the last 3 months, the major part of the respondents use 6 to 10 times and belong to the age group of 18 to 23 years old and 24 to 30 years old. Based on the e-wallet application used, the most used e-wallet is OVO, the total is more than 89 because each respondent can use more than one e-wallet. Based on the average top-up nominal, the majority of those who responded, top-up between 50.000 IDR and 149.999 IDR. Based on the average transaction nominal, the majority of those who responded, the transaction between 50.000 IDR and 149.999 IDR. All respondents list practicality as a reason to use an e-wallet, 55 respondents list safety as a reason to use an e-wallet, while 45 respondents list cashback or promotion as a reason to use an e-wallet.

Table 2. Convergent Validity and Reliability

Variable	AVE	Cronbach's Alpha	Composite Reliability
Perceived ease of use	0.633	0.807	0.873
Perceived usefulness	0.632	0.808	0.873
Customer satisfaction	0.721	0.870	0.911
Continuance intention	0.713	0.799	0.882

Source: Data processed, 2021

Table 3. Indicators of the study

Variables	Statement	Loading Factor
Perceived Ease of Use	I feel that learning to use the e-wallet for transaction is easy	0.775
	The e-wallet application fulfill my wish regarding transaction.	0.818
	I feel that mastering the use of e-wallet application is quick and easy.	0.823
	I feel it is easy when transacting using e-wallet application.	0.765
Perceived Usefulness	My performance is increased by using e-wallet application.	0.730
	My productivity is increased by using e-wallet application.	0.849
	Transacting through the e-wallet application are more convenient than using cash.	0.828
	Transacting through the e-wallet application enhance my effectivity during transaction.	0.768
Customer Satisfaction	I am contended with the e-wallet application.	0.870
	The e-wallet application functioning with good performance.	0.904
	The e-wallet application meet my expectation.	0.836

	I am pleased with my experience in using the e-wallet application.	0.781
Continuance Intention	I intend to keep using the e-wallet application for all transaction.	0.863
	I will use the e-wallet application as frequent as possible.	0.880
	I will recommend the e-wallet application to other persons.	0.788

Source: Data processed, 2021

The convergent validity is tested using the AVE (Average Variance Extracted) value, all variables have an AVE value above 0.500 which means the convergent validity can be accepted. The discriminant validity is tested by using the cross-loading factor. Cross-loading values of each variable are greater on their construct than on other constructs, therefore, all variables pass the discriminant validity test. The reliability is tested using Cronbach's Alpha value, all variables have Cronbach's Alpha value above 0.600 which means the reliability can be accepted. Internal consistency reliability is tested using composite reliability value, all variables have composite reliability values above 0.700 which means the reliability can be accepted. The loading factors of all measured items are above 0.500. Based on the results, all research variables are valid and research instruments are reliable.

Table 3 shows that the indicator of perceived ease of use with highest outer loading value is "I feel that mastering the use of e-wallet application is quick and easy". It means the most important factor that determine perceived ease of use is the speed and easiness of mastering the e-wallet. E-wallet provider need to ensure that their application can be mastered quickly and easily by creating user-friendly system with interactive tutorial and help feature.

Indicator of perceived usefulness with highest outer loading is "my productivity is increased by using e-wallet application". Productivity is based on effectivity and efficiency, as such, e-wallet provider need to make sure that their application can help customers in variety of transactions to increase the effectivity. E-wallet provider can also increase efficiency by providing customers with cashback or reward point system that can reduce transaction cost.

The indicator with highest outer loading value in customer satisfaction is "the e-wallet application functioning with good performance". The most important factor to develop customer satisfaction among e-wallet user is the application performance. It means e-wallet provider need to keep their application up to date by providing maintenance and regular update to ensure smooth performance.

The indicator with the highest outer loading value in continuance intention is "I will use the e-wallet application as frequent as possible". It means high frequency of transactions is the best indicator of e-wallet continuance intention. E-wallet providers can look at the data of the transaction frequency of their users to determine whether their works is on the right direction.

Table 4. R-square

Variable	R-square
Customer satisfaction	0.509
Continuance intention	0.667

Source: Data processed, 2021

The *R-square* of customer satisfaction means perceived ease of use and perceived usefulness explain 50.9% of the variance in customer satisfaction while the remaining 49.1% comes from variables not observed in the model. The *R-square* of continuance intention means perceived ease of use, perceived usefulness, and customer satisfaction explain 66.7% of the variance in continuance intention while the remaining 33.3% comes from variables not observed in the model. The *Q-square* calculated from those *R-square* values is 0.837 or 83.7% which means this research model has high predictive relevance.

Table 5. Hypothesis Testing Results

Hypothesis	Original	T-Statistics	P-Values
Perceived ease of use → continuance intention	0.224	2.274	0.025
Perceived usefulness → continuance intention	0.024	0.254	0.800
Perceived ease of use → customer satisfaction	0.384	4.275	0.000
Perceived usefulness → customer satisfaction	0.411	4.534	0.000
Customer satisfaction → continuance intention	0.639	6.515	0.000
Perceived ease of use → customer satisfaction→ continuance intention	0.245	3.505	0.001
Perceived usefulness→ customer satisfaction→ continuance intention	0.263	3.739	0.000

Source: Data processed, 2021

Table 5 shows that the *p-value* of the first hypothesis is 0.025, under 0.050, it means H_1 is true, the path coefficient is 0.224 which means the influence is positive, therefore, perceived ease of use positively influences continuance intention. The *p-value* of the second hypothesis is 0.800, larger than 0.050, it means H_2 is rejected, therefore, perceived usefulness does not influence continuance intention. The *p-value* of the third hypothesis is 0.000, under 0.050, it means H_3 is true, the path coefficient is 0.384 which means the influence is positive, therefore, perceived ease of use positively influences customer satisfaction. The *p-value* of the fourth hypothesis is 0.000, under 0.050, it means H_4 is true, the path coefficient is 0.411 which means the influence is positive, therefore, perceived usefulness positively influences customer satisfaction. The *p-value* of the fifth hypothesis is 0.000, under 0.050, it means H_5 is true, the path coefficient is 0.639 which means the influence is positive, therefore, customer satisfaction positively influences continuance intention.

The indirect effect of perceived ease of use toward continuance intention through customer satisfaction is significant as its *p-value* is 0.001, smaller than 0.050, which means H_6 is true. The path coefficient of this indirect effect is 0.245, it means the direction of the indirect influence is positive. The coefficient is slightly higher but still comparable to the coefficient of direct influence of perceived ease of use toward continuance intention. The indirect effect of perceived usefulness toward continuance intention through customer satisfaction is significant as its *p-value* is 0.000, less than 0.050, it means H_7 is true. As perceived usefulness does not have a significant direct influence on continuance intention, it means it only has an indirect effect on customer satisfaction as the intervening variable. The path coefficient is 0.263, it means the direction of the indirect influence of perceived usefulness toward continuance intention through customer satisfaction as an intervening variable is positive.

The first hypothesis is accepted, perceived ease of use influences continuance intention with the coefficient value is 0.224 which means if perceived ease of use is increased, it will lead to higher continuance intention. E-wallet customers will have more intent to continue to use the e-wallet if they perceive that the e-wallet is easy to be learned, easy to be used to fulfill their wish, easy to be adept at using, and easy to be used for the transaction. This result supports the studies of Phuong *et al.* [24] and Shang and Wu [26].

The second hypothesis is rejected which means perceived usefulness does not have a significant direct influence on continuance intention. This is similar to the finding of Amin *et al.* [2] but contrary to the findings of Hamid *et al.* [12] and Phuong *et al.* [24]. Even though customer feel that the e-wallet give them convenience while also increasing their productivity, performance, and effectiveness, it doesn't necessarily lead to the intent to use the e-wallet again as other factors need to be taken into account.

The third hypothesis is accepted, perceived ease of use influences customer satisfaction with the coefficient value is 0.384 which means if perceived ease of use is increased, it will lead to higher customer satisfaction. E-wallet customers who believe that the e-wallet is easy to be learned, easy to

be used to fulfill their wish, easy to be adept at using it, and easy to be used for transactions tend to have higher satisfaction. This result supports the study of Phuong *et al*. [24].

The fourth hypothesis is accepted, perceived usefulness significantly influences customer satisfaction with the coefficient value is 0.411 which means an increase in perceived usefulness will lead to an increase in customer satisfaction. E-wallet customers will a have higher satisfaction rate if they feel that the e-wallet provides convenience as well as increase their productivity, performance, and effectiveness. This result supports the studies of Phuong *et al*. [24] and Amin *et al*. [2].

The fifth hypothesis is accepted, customer satisfaction significantly influences continuance intention with the coefficient value is 0.639 which means an increase in customer satisfaction will lead to an increase in continuance intention. E-wallet customers will have more intent to use the e-wallet continually if they are satisfied with the e-wallet performance as it successfully meets their expectations and provides them with a good overall experience. This result supports the studies of Phuong *et al*. [24] and Shang and Wu [26].

The sixth hypothesis is also accepted, this means that ease of use not only has direct also indirect influence toward continuance intention through customer satisfaction which acts as an intervening variable. The path coefficient of the indirect influence is 0.245, as the coefficient of both perceived ease of use to customer satisfaction and customer satisfaction to continuance intention are positive, it means higher perceived ease of use will lead to higher customer satisfaction which in turn will lead to higher continuance intention. Customers who feel that the e-wallet is easy to use tend to a have higher satisfaction rate which makes them have the intention of using it again. This result supports the studies of Phuong *et al*. [24] and Shang and Wu [26].

The seventh hypothesis is accepted, it means that even though perceived usefulness does not directly influence continuance intention, it still indirectly influence it through customer satisfaction as the intervening variable. The coefficient of this indirect path is 0.263, as the coefficient of both perceived usefulness to customer satisfaction and customer satisfaction to continuance intention are positive, this means that higher perceived usefulness will lead to higher customer satisfaction which subsequently leads to more continuance intention. Customers who feel that the e-wallet provides them with beneficial use will have a higher satisfaction rate which in turn makes them have the intent to use the e-wallet continually. This result supports the studies of Phuong *et al*. [24] and Shang and Wu [26].

Conclusion

Both perceived ease of use and perceived usefulness have a direct positive influence on customer satisfaction. Customers who believe that the e-wallet is easy to use will usually have more satisfaction from using the e-wallet compared to those who believe otherwise. Customers who get more benefits from using an e-wallet such as convenience and performance improvement will also tend to have higher satisfaction from using the e-wallet. In turn, customer satisfaction positively influences continuance intention which means a higher satisfaction rate of using the e-wallet will result in a higher intention to use the e-wallet again.

Perceived ease of use has a direct positive influence on continuance intention, it means the more that the e-wallet application is perceived as easy to use by the customer, the higher the intention of the customer to continue using the e-wallet. Perceived ease of use also has an indirect positive effect toward continuance intention through customer satisfaction as an intervening variable, it means the easier to use the customer feel the e-wallet is, the easier they will be satisfied with the service and it will make them have more intention to continue using the e-wallet.

Perceived usefulness does not directly influence continuance intention but it indirectly and positively influences continuance with customer satisfaction as an intervening variable. It means perceived

usefulness need to bring customer satisfaction for the customer before it can lead to continuance intention. The higher the belief of customers that they benefited from using e-wallet will lead to higher satisfaction regarding the e-wallet and this will, in turn, make them have more intention of keep using the application.

To improve perceived ease of use, e-wallet application developers provide instructions for using the application like infographics, landing page, or explainer video for the first time user opens the application. To improve perceived usefulness, the developer should also increase the speed in doing top up from various banks. To improve customer satisfaction, application developers are expected to be able to optimize their applications so that no bugs occur or crash when the user uses the application to transact.

The study is not without limitations. Analysis of the finding reveals that there are unobserved variables that might explain customer satisfaction and continuance intention. Future research needs to consider additional variables that might influence customer satisfaction and continuance intention, such as perceived enjoyment, customer service, trust, and perceived value.

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