

## **Perceived Usefulness, Perceived Ease of Use, and Consumer Satisfaction on Repurchase Intention of Digital Wallet Service (e-wallet)**

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### **Abstract:**

**Background:** The existence of technological developments that have an impact on economic activity has changed the attitude of consumers in responding to technology acceptance. The existence of a cashless payment system is one of the characteristics of technological developments in the banking sector. One of the non-cash payment instruments is e-wallet. Consumer acceptance of this technology is related to the Technology Acceptance Model which relates to the perceived usefulness and perceived ease of using the application. The existence of perceptions of usefulness and Perceived ease of use affects the creation of satisfaction which in turn can encourage consumer's repurchase intentions.

**Materials and Methods:** The sample used is 120 respondents using purposive sampling technique.. Data were analyzed using the Structural Equation Model (SEM) by using the PLS (Partial Least Square) analysis technique. Collection of respondents' answers through distributing questionnaires conducted with Google Form

**Results:** The results of this study indicate that perceived usefulness, perceived ease of use and satisfaction have a positive and significant effect on intention to repurchase. In addition, the role of satisfaction also partially mediates the effect of perceived usefulness and perceived ease of use on intention to repurchase. So it can be said that perceived usefulness and perceived ease of use increase the creation of satisfaction which affects the intention to repurchase.

**Key Word:** perceived usefulness, perceived ease of use, satisfaction, repurchase intention

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Date of Submission: 29-05-2021

Date of Acceptance: 12-06-2021

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### **I. Introduction**

The development of information and communication technology is increasingly developing over time. One of the signs that can be seen is the rapid growth of the internet worldwide. Many aspects of life are affected by technological developments such as education, innovation, and changes in consumer habits (Tomljanovic & Grubisic, 2016). It cannot be denied that the economic sector is also affected by these technological developments. People now tend to use internet assistance to support their economic activities. Fulfilling the need for information that can be found through the internet makes the trend regarding technology increase (Fahlevi et al., 2019). This trend encourages people to be able to take advantage of the existence of technology to facilitate their activities, especially in the economic sector. This phenomenon is used by companies to make it easier for consumers to make payments, namely by creating a non-cash payment system / e-payment. E-Payment is a payment system that utilizes internet technology to support its procedures (Sutia et al., 2020). This can make it easy for e-payment users to make the process of purchasing and paying for products without having to meet face to face with the seller as well as the time efficiency obtained.

In Indonesia, the popularity of non-cash payment applications is on the rise. In July 2019 there were more than 390 million electronic money transactions through non-cash payments, with a nominal value of more than IDR 11.8 trillion. Until mid-2019, the total nominal rupiah value that had been transacted via electronic money reached more than IDR 56 trillion. In 2018, for example, the total electronic money transacted through various platforms stood at IDR 47 trillion. In 2017, the figure was only around IDR 12 trillion. The increase in total transactions is evidence of an increase in e-payment users in Indonesia. In Indonesia, there are currently two types of e-payment payments, namely e-money, and e-wallet. E-money is a card-based non-cash payment, which means that the transaction process uses card media as a means of payment. Meanwhile, an e-wallet is a payment system based on servers and applications by utilizing an internet connection when making transactions. This difference is what makes e-wallets increasingly popular because they are easier to use with smartphones without having to carry the card used for transactions. The increase in e-wallet products is an encouragement from the Indonesian Financial Services Authority to improve economic development. The Indonesian

government also manages an e-wallet service called LinkAja. As the only government-supported e-wallet payment platform, LinkAja is expected to be able to dominate the e-wallet market. However, it doesn't seem like it can happen yet. A survey conducted by iPrice Indonesia, which has a vulnerable time from the 4th quarter of 2017 to the 2nd quarter of 2019, revealed that there was a decrease in usage of the LinkAja application. In 2017, the highest-ranking e-wallet most widely used in Indonesia was Gopay, while LinkAja took second place. Meanwhile, in 2019, LinkAja experienced a decline to be in fourth place overtaken by OVO in second place and DANA in third place. This decline in position is of course directly proportional to the decrease in users of this application.

The reduction in users of this application is thought to be influenced by the satisfaction created by the ease and usefulness felt by users. The results of the pre-survey conducted through the interview process showed that some respondents said they were satisfied using the LinkAja e-wallet application. Consumer acceptance of the technology offered by LinkAja in the form of an e-wallet is related to the TAM (Technology Acceptance Model). TAM focuses on attitudes towards the use of information technology by users by developing it based on the perceived usefulness and ease of using information technology. Behavior using technology is not only influenced by Perceived ease of use but is also influenced by perceptions of usability

Perceptions of usefulness are the benefits that individuals believe can be obtained by using these technologies. Without a person's perceived usefulness for technology, they will not be interested in reusing it even though they have felt the perception of its convenience. Therefore the perceived usefulness needs to be felt by a consumer to be able to increase the intention to repurchase or repurchase. Perceived usefulness and perceived ease of use are the main determinants that play a significant role in consumer behavior in making decisions to adopt or not to adopt a mobile-based technology. Perceived usefulness according to Fadlan (2018) is a situation where the use of technology can bring benefits to those who use it. Public acceptance of technology can be influenced by several factors. One of the factors that influence the level of public acceptance is the perceived usefulness of the technology application. Perceptions of usefulness have a positive influence on people's desire to repurchase technology (Qasim & Abu-Shanab, 2016). Wu & Mohi (2017) suggests that perceived usefulness has a positive influence on the intention to repurchase online payment services. The existence of positively perceived usefulness will have an impact on the repeated use of an online payment product. Two strongest factors influence repeated use or intention to repurchase, namely perceived usefulness and perceived ease (Ozturk, 2016)

Apart from influencing the intention to repurchase, the perceived usefulness also has a positive effect on consumer satisfaction (Tandon et al., 2017). Consumers who feel a positive use of the application of technology will feel satisfied with the product. In the context of online transactions, in addition to usability factors, ease of use is an element that has a positive effect in creating the intention to repurchase consumers in using this technology (Leiva et al., 2016). Ease of use will reduce a person's effort (both time and effort) in learning information technology. This comparison of Ease of use indicates that people who use information technology work easier than people who work without using information technology manually. Fostering consumer intentions to repurchase in online payment applications is not easy. The intention to repurchase is related to the plan of the consumer to repurchase the brand within a certain period.

the use of technology in transaction procedures that have a simpler tendency will increase consumers' intentions to repurchase which in turn will have an impact on the satisfaction and loyalty. Offering ease of use of technology in applications is one of the strategies to compete in online business. However, the results of this study contradict the results of the study by Oroh et al. (2015) which shows that there are insignificant results regarding the effect of perceived ease of use on repeated use or intention to repurchase. From the results of this study, this study tries to re-analyze how the effect of perceived ease on intention to repurchase by adding a mediating variable to the research model, namely the satisfaction. In an online environment, customer satisfaction is one of the important keys that lead to increased customer retention and long-term growth of online stores. Customer satisfaction is a situation that is shown by consumers when they realize that their needs and wants are as expected and well fulfilled. In addition, satisfaction will also create an intention to repurchase a product or service. Adoption of technology accessed via mobile is driven by the perception of benefits or perceived usefulness that support the speed of transactions.

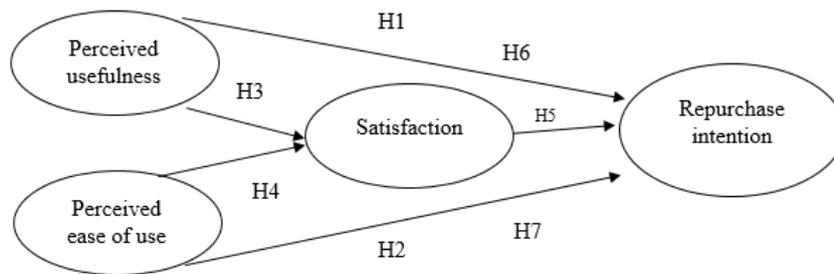


Figure 1 Conceptual Framework.

**Hypothesis**

- H1: Perceived usefulness has a positive and significant effect on repurchase intention
- H2: Perceived ease of use has a positive and significant effect on repurchase intention
- H3: Perceived usefulness has a positive and significant effect on customer satisfaction
- H4: Perceived ease of use has a positive and significant effect on consumer satisfaction.
- H5: Customer satisfaction has a positive and significant effect on repurchase intention
- H6: Consumer satisfaction significantly mediate Perceived usefulness on repurchase intention
- H7: Consumer satisfaction significantly mediate Perceived ease of use on repurchase intention

**II. Methods**

The research scope is the area of consumer behavior. There is an assessment of how society's acceptance of technology with Perceived usefulness and Perceived ease of use creates satisfaction. This satisfaction will shape the reuse or repurchase intention of LinkAja e-wallet users. A research location is a place or area where the research will be carried out. The research took place in Denpasar. Denpasar was chosen as the location in this study because it is the center of the capital as well as the center of trade. It can be said that the mobility of transactions here is higher than in other regions. In addition, according to a survey conducted by the Sloka Institute, the largest internet user in Bali is Denpasar, amounting to 54.2 percent. This study uses purposive sampling with the criteria: Respondents have graduated from high school, know and use the LinkAja e-wallet in transactions, domiciled in Denpasar City. The number of indicators used is 15 indicators so that the number of respondents involved is 15 x 8 =120 respondents. Collecting data in this study is a survey method with questionnaire distribution techniques via a google form, measured by a Likert scale,

**III. Result and Discussion**

Respondents were dominated by men (63.3 percent) while female respondents were 36.7 percent. Most of the respondents were 18-24 years old (35.8 percent) and most of them were also undergraduates (45 percent).

Table 1: Results of the Inter-Variable Test

	Direct Effect					Indirect Effect		
	Original Sample	Sample Mean	Std. Dev	T Statistic (O/STDEV)	P Values	Coefficient	t	P values
Satisfaction → Repurchase intention	0.312	0.315	0.091	3.452	0.001			
Perceived usefulness → Satisfaction	0.364	0.359	0.091	4.022	0.000			
Perceived usefulness → Repurchase intention	0.300	0.303	0.101	2.955	0.003	0.114	2.912	0.004
Perceived ease of use → Satisfaction	0.476	0.482	0.090	5.283	0.000			
Perceived ease of use → Repurchase intention	0.323	0.317	0.109	2.958	0.003	0.149	2.469	0.014
R-square Repurchase intention : 0.730								
R-square Satisfaction : 0.626								

The R-square value of the repurchase intention variable is 0.730. It can be interpreted that 73.0% of the variability of the repurchase intention construct is explained by the Perceived usefulness variable, Perceived ease of use, and satisfaction, while the remaining 27% percent of the repurchase intention variable is explained by variables outside the model. Likewise with the satisfaction variable with an R-square value of 0.626. This means that 62.6% of the satisfaction variable is influenced by Perceived usefulness and perceived satisfaction, while 37.4% is influenced by other variables outside the model.

**The effect of Perceived usefulness on repurchase intention**

Perceived usefulness has a t-statistic value of 2.955 (> 1.96) and a p-value of 0.003 (<0.05), which means that the hypothesis is accepted. This means that there is a positive and significant relationship between perceived usefulness and repurchase intention, which means that the better the perceived usefulness of the respondents, the

higher the repurchase intention of the Link-Aja e-wallet application. On the other hand, if consumers feel that the use of an application is lacking, the desire to reuse the application will be low. These results are in line with research conducted by Lopes et al. (2020), Farah et al. (2018), Karjaluoto et al. (2018). Consumers who feel that the application is very useful in assisting the transactions they carry out are likely to have plans to reuse the application. This means, to increase the sustainability of consumers in using the e-wallet, LinkAja must be in line with the usefulness of the features provided so that the intention to reuse can increase.

#### **The effect of perceived ease of use with repurchase intention**

Perceived ease of use for repurchase intention has a t-statistic value of 2.958 ( $> 1.96$ ) and a p-value of 0.003 ( $< 0.05$ ) which means that the hypothesis is accepted, so Perceived ease of use has a positive and significant effect on repurchase intention. These results are in line with research conducted by Salim et al. (2017). The absorption of technology that can be used easily, such as having clear procedures and having a low level of complexity will be an added value for the application in the eyes of consumers. Consumers who feel that an application is easy to use will repurchase it in the future. Therefore, Perceived ease of use is an important factor in maintaining the continuity of the use of the LinkAja e-wallet application

#### **The effect of Perceived usefulness on satisfaction**

The effect of the perceived usefulness variable on the satisfaction variable, has a t-statistic value of 4.022 ( $> 1.96$ ) and a p-value of 0.000 ( $< 0.005$ ) which means that the hypothesis is accepted. This means that there is a positive and significant influence between the relationship of Perceived usefulness on satisfaction. The higher the Perceived usefulness felt by consumers towards the LinkAja e-wallet, the higher the level of satisfaction felt by these consumers. Satisfaction is a variable that is related to the achievement of consumer expectations for an item. The use of features that are good and can help consumers in carrying out transactions will create a sense of satisfaction after using the LinkAja e-wallet application. The creation of satisfaction after using an application based on Perceived usefulness is supported by previous research conducted by Thongsri et al. (2019); Marinkovic & Kalinic (2017). They revealed that the better the perceived usefulness, the higher the satisfaction created from using the application.

#### **The effect of Perceived ease of use on satisfaction**

The perceived ease of use variable has a t-statistic value of 5.283 ( $> 1.96$ ) and a p-value of 0.000 ( $< 0.05$ ) which means that the hypothesis is accepted. So the conclusion from which the data is taken is that there is an influence between perceived ease of use on satisfaction, which is positive and significant. The higher the Perceived ease of use felt by consumers when using the LinkAja e-wallet application, the higher the satisfaction obtained. The influence between Perceived ease of use associated with clear procedures and minimal difficulty in using an application can create a sense of satisfaction in the minds of consumers after using the LinkAja e-wallet. Applications that are easy to use will be more easily absorbed and become the choice of consumers. Therefore, it is very important to have a positive effect after using the application to maintain continuity of use. Hammoud et al. (2018) reveal that Perceived Ease of use is one of the most important factors in creating customer satisfaction.

#### **The effect of satisfaction on repurchase intention**

Furthermore, the satisfaction variable has a t-statistic value of 3.452 ( $> 1.96$ ) and a p-value of 0.001 ( $< 0.05$ ). This means that the hypothesis is accepted, which means that there is a positive and significant influence between satisfaction and repurchase intention. It can be said that if the respondent's satisfaction in using the Link-Aja e-wallet application is high, the higher the consumer's intention to reuse the application. The desire of consumers to reuse a product or service is related to the feelings that are created after use. If a positive feeling is created, such as a feeling of satisfaction, the higher the likelihood of consumers reusing the product. Satisfaction is generally created because consumer expectations for a product used have been fulfilled. Repurchasing of certain products or services occurs because of a planned decision from someone, considering the situation that occurs and the level of satisfaction and what consumers get from a product or service, will create a positive impression that shows that consumers get what they need and want so that consumers do repeat purchase. Therefore, a company needs to maintain customer satisfaction. Previous studies that received similar results to this study were Oghuma et al. (2016), Hsiao et al. (2016), Joo et al. (2017), Slack et al. (2020)

#### **The role of satisfaction mediates Perceived usefulness on repurchase intention**

The value of the direct influence coefficient between the Perceived usefulness and repurchase intention variables is 0.300. The addition of the satisfaction variable as a mediating variable has a different effect on the direct relationship between perceived usefulness and repurchase intention. The results in this study indicate that H6 is accepted, which means that satisfaction can mediate positively and significantly the influence between the

Perceived usefulness variable and the repurchase intention variable. It can be said that the more uses in a product it will also affect the increase in consumer satisfaction in using the product. With high satisfaction, the intention to reuse the product will also increase. Repurchase intention can be influenced by satisfaction after experiencing the benefits provided by a product (Ibzan et al., 2016). Satisfaction is created from the fulfillment of expectations (Kim et al., 2016)

#### **The role of satisfaction mediates perceived ease of use on repurchase intention**

The value of the direct influence coefficient between the variable perceived ease of use and repurchase intention is 0.323. The addition of the satisfaction variable as a mediating variable provides a change in the direct relationship between perceived usefulness and repurchase intention. The results in this study indicate that H7 is accepted, which means that satisfaction can mediate positively and significantly the influence between the Perceived ease of use variable and the repurchase intention variable. It can be said that the easier the use of a product will also affect the increase in consumer satisfaction in using the product. With high satisfaction, the intention to reuse the product will also increase. Perceived ease of use has a significant effect on providing satisfaction in use, and that will have an impact on the intention to reuse the services offered. Research conducted by Trivedi & Yadav (2018) reveal that it is important for companies to be able to increase ease of use because it is considered to increase consumer satisfaction so that they intend to carry out repeated use (Gong et al., 2018)

#### **IV. Conclusion**

Based on the research results, it can be concluded that Perceived usefulness has a positive and significant effect on repurchase intention; Perceived ease of use has a positive and significant effect on repurchase intention; Perceived usefulness has a positive and significant effect on satisfaction; Perceived ease of use has a positive and significant effect on satisfaction; Satisfaction has a positive and significant effect on repurchase intention; Satisfaction can partially mediate the effect of perceived usefulness on repurchase intention; Satisfaction can partially mediate the effect of perceived ease on repurchase intention. Further research can be carried out in different areas, different times or in different product or service categories to be able to add empirical evidence regarding the relationship between Perceived usefulness, Perceived ease of use and repurchase intention with satisfaction as the mediating variable.

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Ida Ayu Agung Upadianti Jayantari, et. al. “Perceived Usefulness, Perceived Ease of Use, and Consumer Satisfaction on Repurchase Intention of Digital Wallet Service (e-wallet).” *IOSR Journal of Business and Management (IOSR-JBM)*, 23(06), 2021, pp. 56-61.