# 24 factors affecting e-wallet usage

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# Factors Affecting E-Wallet Usage Intention During Covid-19 Outbreak In Indonesia

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***Abstract**: This research is performed to analyze the influence of perceived covid-19 risk, perceived ease of use, perceived usefulness, toward intention to use e-wallet during covid-19 pandemic. The respondents of this study as many 211 people different city in Indonesia*

*Based on the result of this research , it has come to the conclusion: 1) perceived covid risk and perceived ease of use has positive influence on intention to use, 2) perceived ease of use has positive influence on perceived usefulness, 4) perceived usefulness can not mediates, 5) perceived usefulness has negative influence on intention to use.*

***Keywords**: Perceived Covid-19 Risk, Perceived Ease of Use, Perceived Usefulness, Intention to Use E-Wallet.*

## I. Introduction

The recent spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and its associated coronavirus disease has gripped the entire international community and caused widespread public health concerns. The coronavirus 2019 disease (COVID-19) pandemic has created both a public health crisis and an economic crisis in the world.

One of the efforts to suppress the increasing number of people infected Covid-19 is the implementation PSBB policy. However, apart from reducing the spread of Covid 19, the application of physical distancing has an impact on various economic activities. Recent papers show that physical distancing policy impact crisis across industries, the economic activity affected significantly (Fernandes, 2020). One of the economic activities affected is the payment system for business transactions.

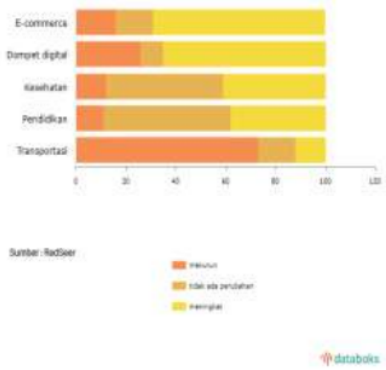
Indonesian government also decided to implement the Large-Scale Social Restriction (PSBB) policy, and it has an impact on payment transactions. Based on BI's records, digital transactions increased 37.8 percent on an annual basis (year on year / yoy). This transaction includes digital banking transactions and transfers. From the impact of phenomenon of the large-scale social restriction (PSBB) policy, which affects payment transactions, people choose to make transactions with digital payments.One of the popular of digital payment is electronic wallet (e-wallet).

E-wallet can be defined as a convenient shopping tool without need to carry cash (non-cash) that can be done while doing other activities (Magadewandanu et al 2016).

E-wallet is one of finance technologies that can help customer'ss to make the payments is more easy and more practical. finance technologies that can help customer's to make the payments is more easy and more practical.

The using of e-wallet have increased since the government confirmed the COVID-19 case in Indonesia. E wallets were chosen because they were easy and convenient to transact in real time without need to leave home. Seeing the growth of digital wallets in Indonesia during pandemic. Researcher at the Center of Innovation and Digital Economy Institute for Development of Economics and Finance (INDEF) according Bhima (2020) revealed that the pandemic is the momentum for e-wallets to grow. He explained e-commerce related with e wallet during the pandemic showed a fantastic growth as shown in table 1.1 below :

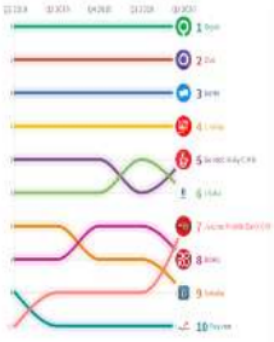
Figure 1. Digital Service Users in Indonesia during the COVID-19 Pandemic




*Source: Data RedSeer (2020)*

Table 1 show that the use of a number of digital services in Indonesia increased during the COVID-19 pandemic, and the use of digital wallets has increased up to 65%.

Figure 2. Data of Digital Wallet User in Indonesia



*Source :Databoks (2020)*

Figure 2 above shows that there are various kinds of e-wallet based non-bank in Indonesia that are of interest to users, including the ranking 1,2,3 which shows the existence and the most popular ones by users.Another data showed that some of fintech-based payment systems have an increase transactions. New OVO users recorded a 267% increase during the pandemic. Furthermore, the DANA e-wallet transaction growth reached 50%. Next is Gopay, Gojek's electronic wallet, which recorded a 103% increase in transactions during the pandemic (kompas, 2020).

Previous research conducted by Anjelina (2018) shows that customer's intention to use e-wallet is determined by the variable based on Technology Acceptance Model (TAM) and combined construction addition that comes from the theory of innovation adoption that increase predictive power of TAM. Anjelina (2018) stated intention to use e wallet product was influenced by TAM on the intention to use e wallet mediated by the perceived usefulness and perceived ease of use. This expands and combined additional constructs derived from innovation adoption theory, that have been validated by the adoption study as a relevant construct that increases the predictive of TAM. This additional construction iscompatibility, perceived trust, perceived risk, and perceived cost.

According to Aji et al. (2020) supports the findings of previous research. First, the effect of perceived risk on intention to use e-wallet.Perceived risk can be defined as the perceived uncertainty in a purchase situation (Im et al., 2008). Perceived risk is a multi-dimensional construct, it hasseveral dimensions that may vary according to the product or service (Kassim & Ramayah, 2015). When associated with online transactions, perceived risk has several dimensions such as performance risks, financial risks, time/convenience risks, and psychological risks (Forsythe & Shi, 2003).

Maser and Weiermair (1998) also added another dimension which is disease risk, which ismore relevant to this study context. Research conducted by Anjelina (2018) found that the perceived ease of risk negatively influences intention to use e money customer's in Indonesia. The result shows that customer's in Indonesia have a fear of the risk when adopting e-money, such as lost their money. In contradicts with previous research (Aji et al., 2020) which found that perceived risk and perceived usefulness directly affected intention to use e-wallets.

Second, the effect of perceived ease of use on customer's intention to use e wallett. There are differences in research results from the effect of perceived ease of use on customer's intention, which makes researchers interested in conducting this research. Research conducted by Anjelina (2018) found that the perceived ease of use negatively influences intention to use e money customer's in Indonesia. The result shows that customer's in Indonesia have no experience using e-money or the spread of e-money really uneven, so they are unable to judge the ease of use of e money. In contradicts with previous research (Masa et al., 2020) which found that perceived ease of use, with easy of learn, controllable, clear and understandable, flexible, easy become to skillful, and easy to use as indicators, partially has positive and significant influence on Behavioral Intentionto use. This research gap, encourage researcher to re-examine perceived ease of use and its effect on intention to use e wallet.

Furthermore, perceived usefulness can be another factor that can affect behavior intention. According to Anjelina (2018) supports the findings of previous research. First, the effect of perceived usefulness on behavior intention. According to Venkatesh & Davis (2000) PU reflects 'the degree to which a person believes that using a particular system would enhance his or her job performance. Phonthanukitithaworn et al. (2016) PU is defined as the extent to which an individual believes that using m-payment services will enhance his or her productivity

and performance in conducting payment transactions. PU also shows how m-payment can help users to achieve task-related goals, such as being more effective and efficient in activities.

The models of technology acceptance model indicated the positive impact of the ease of use on the perceived usefulness. Furthermore, the relevant studies have confirmed this relationship (e.g., Featherman et al., Francisco et al., ) Another research according to (Venkatesh & Davis, 2000) stated perceived usefulness is also affected by perceived ease of use, because the easier it is using the system is more usefulthat system to the user. But in other research conducted Kumar & Professor (2020) found that the perceived ease of use negatively influences perceived usefulness. This research gap, encourage researcher to re-examine perceived ease of use and its effect on perceived usefulness.

According to the background of the explanation above and a very interesting phenomenon to be studied about factors toward intention to use e wallet in Indonesia. Researchers will give the title

## II. Literature Review and Hypotheses

**Mobile Payment and Electronic Wallet**

Mobile payment is categorized as an electronic wallet, which includes non-cash transaction, it does not use media such as cards, and it allows transaction through electronic channels. Different from debit or credit cards, a transaction using digital wallet is not directly through the third parties or intermediaries (Amorso & Watanabe, 2012) Mobile wallets are can be considered as a medium to make instant payments and undertake transactions through smart phones. The consumers can save their banking details and personal information, payment Anjelina, shopping details etc. in mobile wallets. They allow consumers to use their credit or debit cards for various baking transactions like shopping, bill payments, fund transfer booking tickets and so on (Dasgupta, 2011).

E-wallet also is a payment instrument that make the payments by using mobile phone so that ewallet can be one of mobile payments also. E-wallet is a mobile payment in the electronic wallet category that can make non-cash transactions, does not use media such as cards to make payments, and can carry out electronic media transactions such as mobile devices (Olsen, 2011). according Hidayati (2006) the definition of e-money issued by Bank for International Settlement, the electronic money as stored value or prepaid products in which a record of the funds or value available to a consumer is stored on an electronic device or application in the consumer's possession. It can be conclude that a digital wallet or e-wallet is an electronic device, service, or a software program (application) that allows its users to make online transactions such a transfer money with other users or purchase in merchats, online shopping, tickets and so on.

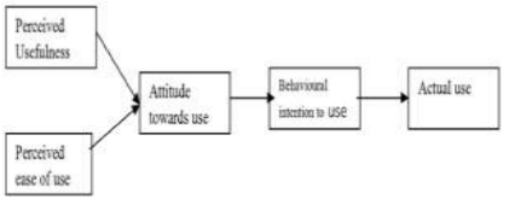
## III. Intentiom To Use

Davis et al. (1989) Intention to use is a desire someone to do certain behavior that is considered right. Intention to use is a a factor that leads people to use the technology. The indicators of intention to use according to (Davis et al., 1989) are the possibility of using, being interested in using new technology in the near future, and willing to use new technology when the opportunity arises. Intention is defined as a person's intention or a motivational factor that captured how much effort a person is willing to dedicate to perform a behavior (Ajzen & Fishbein, 1991) ). Such behavior or activities can be based on positive or negative feelings (Ajzen & FIshbein, 1991). Intention to use is a psychological express that speaks to a promise to do an activity or activities, later on, includes mental exercises, arranging and planning. It is a demonstration of deciding rationally upon some activity or result or the end or protest expected. Behavioral intention is defined as a person's perceived likelihood or subjective probability that he or she will engage in a given behavior.

## IV. Technology Acceptance Model

The Technology Acceptance Model (TAM) is an adaptation of TRA specifically tailored for modeling user acceptance of information systems (Davis et al., 1989). The model provides a basis for tracing the impact of external factors on internal beliefs, attitudes, and intentions (Davis et al., 1989). The two main structures of TAM are perceived usefulness and perceived ease of use. Perceived usefulness is defined as the degree to which a person believes that using a particular technology can increase their work efficiency, whereas the perceived ease of use is the extent to which believes that using a particular technology can be easily achieved or free of effort. TAM believes that behavioral intention determines actual system use, and behavioral intention is determined by attitudes and perceived usefulness.

Figure 3. Technology Acceptance Model (TAM)




## V. Perceived Risk

Perceived risk is a construct that reflects feelings of uncertainty among consumers regarding the possible negative consequence of using new technology that may dissuade adoption (Bauer 1967). Perceived risk can affect a person's intentions to use e wallet services as they are less likely to engage in m-payment transactions if they perceive this type of service to involve a high level of risk. Perceived risk is defined as the perceived uncertainty in a purchase situation (Im et al., 2008). It is a sense of loss (Bauer, 1967), involving potentially positive or negative outcomes. But in consumerbehavior literature, it is more focused on the negative outcomes (Stone & Gronhaug, 1993). According to the literature, perceived risk is a multi-dimensional construct. It has several dimensions that may vary according to the product (or service) class (Kassim & Ramayah, 2015). When associated with online transactions, perceived risk has several dimensions such as performance risks, financial risks, time/convenience risks, and psychological risks (Forsythe & Shi, 2003).

## VI. Perceived Ease of Use

The ease of use perspective convince users that the application of information technology will be very easy, which will not be a burden for them. For users, the feeling of being easy to use is certainly a good thing, which makes people interested in trying and finding it easy to use new technologies, so that users can continue to use these technologies. The perception of ease of use depends on the ability of consumers themselves, to apply a new innovation system and can evaluate its benefits easily (Consult, 2002). Perceived ease of use, refers to the degree to which a person believes that using a particular system would be free of effort. This follows from the definition of "ease": freedom from difficulty or great effort. All else being equal, it claim, an application perceived to be easier to use than another is more likely to be accepted by users ( Davis et al., 1989). Perceived ease of use refers to the ability of consumers to experiment with a new innovation and evaluate its benefits easily (Masa et al., 2020).

## VII. Perceived Usefulness

Davis (1989) was pioneer in developing technology acceptance model which helped in predicting the intention to use helps in accepting information system and information technology. Perceived usefulness can be understood as the degree of confidence that emphasizes the extent to which consumers believe that using a particular system can improve his or her performance (Davis et al., 1989). Technically, e-wallet platform is a very effective method in various types of payment during physical distancing or self-quarantine periods. Moreover, e-wallets can be an alternative payment system to support the government reducing the spreading risk of COVID-19 (Aji et al., 2020). Perceived Usefulness postulated that if a user finds a system useful, he/she will develop a positive attitude about it, and thus uses the system to obtain the benefit, if able to use the system (Davis et al., 1989). Several earlier studies consistently found that perceived usefulness is a strong predictor of intention to use e-money, perceived usefulness has significant relationship with intention to use e-wallet, the companies developing apps should emphasize on these variables to create value and offer new services or features effectively (Nag & Gilitwala, 2019).

### The Influence of Perceived Covid risk on Intention to Use E-Wallet

COVID-19 has directly impacted the way how consumers views payments today globally, the strong regional payment preferences that existed before the start of the COVID-19 pandemic still remain. However, COVID-19 is definitely having an impact on how people pay online. Perceived risk is defined as the perceived uncertainty in a purchase situation (Im et al., 2008). It is a sense of loss (Bauer, 1967), involving potentially positive or negative outcomes, but in consumer behavior literature, it is more focused on the negative outcomes (Stone & Gronhaug, 1993). Such as in the context of perceived risk have a negative influence on the adoption of internet banking (Nimtrakoon, 2015), perceived risk also was found to have a negative influence on BI adopt mobnile payment in India (Madan & Yadav, 2016). According to Hasan et al. (2017) disease risk is the possibility of individuals affected by epidemic diseases such as MARS, SARS, Anthrax, AIDS, etc. Therefore, the use of e-wallet is the best solution to prevent the risk of transmitting COVID-19 (Aji et al., 2020). Most studies found that the effect of perceived risk on intention is negative (Marafon et al., 2018). However, the results might be different for this study context. In this study, the higher the COVID-19 risk on physical cash perceived by the individuals, the stronger the intention to use e-wallets for the payment transaction (Aji et al., 2020). The hypothesis can be proposed:

H1: Perceived risk positively affects intention to use e-wallets product in Indonesia

### The influence of ease of use and intention to use e wallet

The ease of use perspective can convince users that the information technology will be applied is easy and it is not a burden for them. With the existence of a sense of easy to use for the users is certainly a good thing that makes people interested in trying and feel the ease of using new technology so that it can make users to continue to use the technology (Masa et al., n.d.) Perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort or freedom from difficulty ( Davis et al, 1989), that it is always easy and desirable to undertake activities which require less time to be implemented since people sort out activities in chronological order as per their preference (Churchill 1991). . Several earlier studiesconsistently found that perceived ease of use, with easy of learn, controllable, clear and understandable, flexible, easy become to skillful, and easy to use as indicators, partially has positive and significant influence on behavioral intention (Masa et al., n.d.). The effect of perceived ease of use on intention is positif that the benefit for the user can be made aware that using e wallet can make financial transactions simple and fast (Nag & Gilitwala, 2019). So that the hypothesis can be proposed:

H2: Perceived ease of used has positive role on consumer's intention to use e-wallets product in Indonesia

**The influence perceived ease of use and perceived usefulness**

The models of technology acceptance model indicated the positive impact of the ease of use on the perceived usefulness. Furthermore, the relevant studies have confirmed this relationship (e.g., Featherman et al. , Francisco et al.,) Another research according to (Venkatesh & Davis, 2000) stated perceived usefulness is also affected by perceived ease of use because, the easier it is using the system is more usefulthat system to the user. But in other research conducted (Kumar & Professor, 2020) found that the perceived ease of use negatively influences perceived usefulness. This research gap, encourage researcher to re-examine perceived ease of use and its effect on perceived usefulness.The hypothesis can be proposed:

H3: Perceived ease of use has positive influence on perceived usefulness

**The influence of perceived usefulness and intention to use e wallet**

According to Davis et al., (1998), Perceived usefulness is defined the degree to which a person believes that using a particular system would enhance his or her job performance. Nowadays, electronic wallet platforms are an effective method for making various non-cash payments during physical distancing. By using digital payments, consumers can make safe transactions without using cash. In addition, e-wallets can be used as an alternative payment system to support the government in reducing the risk of COVID-19 transmission. Several earlier studies found that perceived usefulness had a significant positive influence on behavioral Intention to use ovo digital wallet (Anggoro, 2019). Several earlier studiesconsistently found that perceived usefulness is a strong predictor of intention to use e-money (Aji & Dharmmesta, 2019). The hypothesis can be proposed:

H5: Perceived usefulness has positive role on consumer's intention to use e-wallets product in Indonesia

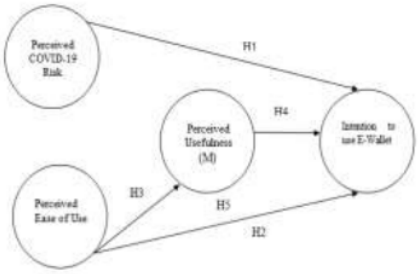
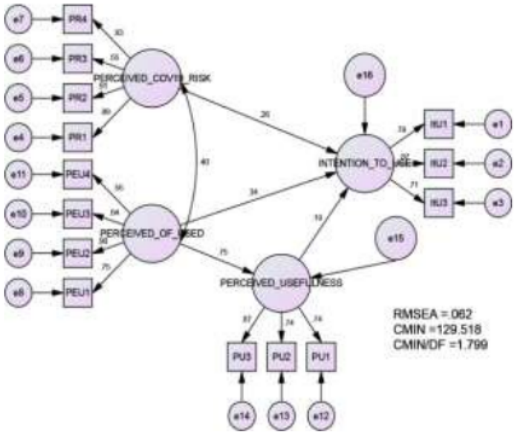



*Figure 4. Research Model*

## VIII. Research Methods

This research has a type that is quantitative with the survey method by using questionnaires as a tool to obtain the data. This research conducted by distributing online questionnaires to sample respondents e wallet users in Indonesia. The subject is the users of all server-based non-bank e-wallets, who have made transactions through e-wallet applications. The object of this research is perceived risk, perceived usefulness, perceived ease of use. The data were collected from questionnaire by distributing list of questions and statements that related to the research variables and were filled by respondents. The questionnaire was directly distributed to respondents and through online survey. This research was conducted in February 2021. The type source of data that conducted in this research is primary data that were obtained by distributing the questionnaires to the users regarding to e-wallet product. This study used Structural Equation Model for the data analysis technique. It is statistical technique that allow to testing a series of relative complex connections simultaneously. A complex relationship can be built between one or several dependent variables with one or more independent variables. Perhaps there is also a variable that has double role as independent variable in a connection, but being dependent variable on another connection given the existence of tiered causality connection. Each of the dependent variable and independent variable can be shaped to factor or construct built from some variable indicators. Similarly among the variables that can be a form of a single variable that is directly observed or directly measured in research process.

## IX. Result And Discussion




The picture above shows the model construct of the research. However, a construct cannot be said to be good if it does not meet the goodness of fit criteria. Goodness-of-Fit measures the suitability of the actual or observed input (covariance or correlation matrix) with the predictions of the proposed model. There are four types of Goodness-of-Fit measures :

1) Basic goodness of fit
2) Absolute fit indices
3) Incremental fit indices
4) Parsimonious fit indices

Basic goodness of fit is the basic measurement indicator model, namely Chi-square, Degrees of freedom. Absolute fit measures measure the fit model as a whole (both structural models and measurement models together), consisting of: chi-square, goodness of fit idices (GFI), and root mean square error of approximation (RMSE).Incremental fit indices measure to compare the proposed model with other models specified by the researcher, consists of adjusted goodnes of fit index (AGFI), norm fit index (NFI), comparative fit index (CFI), incremental fit index (IFI), dan relative fit index (RFI), Tucker Lewis Index (TLI).

In empirical research practice, a researcher does not have to meet all the goodness of fit criteria. The use of 3 to 4 goodness of fit criteria is considered sufficient to assess the feasibility of a model with the conditions that each of the goodness of fit groups, namely absolute fit indices, incremental fit indices and represented parsimonious fit indices (Hair et.al., 2014).

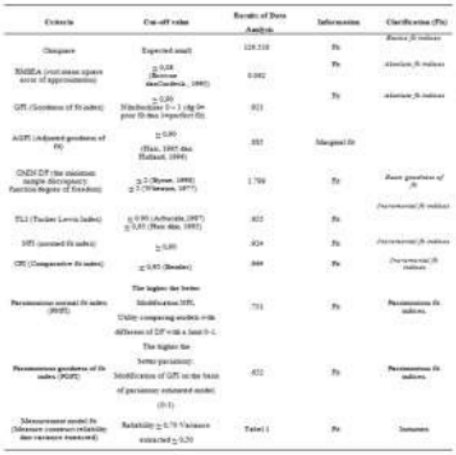


*Figure 6. Research Model*

## X. Hypothesis Development

When the model construct has passed the instrument and model test according to the goodness of fit criteria. Next is the interpretation of the hypothesis test output. The influence test between variables can be seen from the P value. In addition, the direction of influence can be seen using the Beta Output value of hypothesis testing can be seen in the table :

| | | | Estimate | S.E. | C.R. | P | Hypotesis |
|---|---|---|---|---|---|---|---|
| Perceived of usefulness | <--- | Perceived Ease of Used | .691 | .082 | 8.384 | *** | Accepted |
| Intentionto Use | <--- | Perceived Ease of Used | .476 | .174 | 2.739 | .006 | Accepted |
| Intention to Use | <--- | Perceived of usefulness | .291 | .182 | 1.600 | .110 | Rejected |
| Intention to Use | <--- | Perceived of Cov19 Risk | .200 | .056 | 3.551 | *** | Accepted |

*Figure 7. Research Model*

Based on the results of the analysis, the sobel test is not required to determine the indirect effect or function of the mediating variants. This can be identified through the influence of the intervening variable (Perceived of usefulness) not significant to Intention to Use. Therefore, it can be concluded that perceived of usefulness cannot mediate the relationship of perceived ease of use to intention to use.

## XI. Discussion

Out of 5 hypotheses, 5 were fully supported:

1) Current study has a result that mostly all studies found that the effect of perceived risk on behavior is negative (Marafon et al., 2018), also research result from Anjelina (2018), Nimtrakon (2015), Madan & Yadav (2016), Apidana et al., (2019) stated that perceived risk negatively influences intention to use electronic money. Risk is one of the factors considered by customers in making a decision whether to use mobile banking or not. The higher it is risk, the customer will discourage his use of mobile banking (Cita Melasari, 2018). However, this research will be different in perceived risk context, the result from Aji et al., (2020) The use of e-wallet is the best solution to prevent the risk of transmitting COVID-19 and perceived covid risk positively affect intention to use. Perceived risk associated with virus transmission will be positively affected customers' intention to use nonphysical money. Perceived covid risk has positive influence on intention to use e-wallet. The results show that COVID-19 outbreak has made customers in indonesia worried about getting infected by covid-19 that can be possibly transmitted through physical money. As mentioned, covid-19 droplets might easily land on inanimate objects (Ather et al., 2020). Based on this possibility, The results supported and also gave an alternative to previous findings. Earlier studies confirmed that there is a negative relationship between perceived risk and intention (Khusbu Madan & Rajan Yadav., 2016; Anjelina et al., 2018). But the research study of Aji et al (2020) showed that perceive covid risk is significantly affects intention to use. and this study result context, perceived risk of COVID-19 significantly affects customers' intention to use e-wallet. On the other hand, it means that COVID-19 risk perception has a negative connection with the intention to use physical money.
2) Previous study from Masa et al., (2020) perceived ease of use with easy to learn and operate, and easy to use, partially has positive and significant influence on intention to use. But contradictive result from Anjelina (2018) which stated that perceived ease of use is negatively influence intention to use, the users in Indonesia haven't felt the ease of using e-money or not been evenly distributed, so they can not judge the ease of using e-money. But, the result of this study shows that perceived ease of use has a significant

influence on intention to use e-wallet product. It means that the higher level of customers' perceived ease of use is followed by a higher level of intention to use e-wallet product. From the survey result to asses perceived ease of use based on the questionnaire, perceived ease of use is considered by respondents as one factor that can influence respondent's intention to use e-wallet products. Perceived ease is a factor that influences the acceptance of the use of information technology. The respondents stated that it is easy to learn the uses and features of the e-wallet, with the implement the Large-Scale Social Restriction (PSBB) policy and physical distancing, transactions can be carried out using e-wallets, it is also beneficial for both sellers and buyers because they do not need to look for fractions for change.

3) Current study from (e.g., Featherman et al., Francisco et al., ) has a result that perceived ease of use has a positive impact on perceived usefulness. Another result from Venkatesh & David (2000) stated perceived usefulnessaffected by perceived ease of using theuse, it's means that the easier using he aplications it will be more usefull for the user. Contradictive result tudies from Kumar & Professor (2020) found that the effect of perceived ease of use negatively influence on perceived usefulness.The third hypothesis that stated that perceived ease of use have a positive effect perceived usefulness was accepted. That means if respondent feel the higher of level perceived ease of use, hence the higher also in perceived usefulness about the bad or good of e-wallet. From respondent point of view, the respondents believe that easy of using e-wallet, willing to know and learn the features, many offered interesting for respondents. So, the respondent feel satisfy to using e-wallet during or before outbreak.
4) Current studies found that the effect of perceived usefulness reflect the degree to which a person believe that using system is enhance their job (Venkatesh & Davis, 2000), also research result from Aji et al., (2020), Anggoro (2019), Aji & Dharmmesta, 2019) stated that perceived usefulness directly positively affected intention to use e-wallet. But, in this result study fourth hyphothesis is rejected it shows that perceived usefulness has no influence on intention to use e-wallet products. It means that the higher level of perceived usefulness is not always followed by a higher level of intention to use e-wallet products. This result related with the previous study from (Utami, 2017) that sated perceived usefulness negatively influence inetntion to use e-wallet by student, it can be seen that respondents think that the usefulness of e-wallet products is not their main reasons for using e-wallets. In the view of respondents, the use/benefits of using e-wallets during the pandemic is considered less of a reason for them to use e-wallets, the use of e-wallets is considered the same as cash, besides that most respondents do not feel worried about the use of cash. In addition, people still often use cash transactions in their daily transaction even in a pandemic, because they claim to be aware of health protocols such as washing hands. Some respondents stated that the ease of e-wallets in transactions allows them to tend to be more wasteful, therefore the balance in e-wallets is quite small in nominal.
5) Based on the results of the analysis it is known that perceived usefulness can not mediates the effect of perceived ease of use on intention to use e-wallet. This is contradictive with research by Venkatesh & Davis, (2000) states that perceived usefulness fully mediated the effect of perceived ease of use on intention to use. Based on the results of the analysis on the fourth hypothesis that stated intervening variable (perceived of usefulness) on intention to use is not significant. So, the sobel test to determine the indirect effect and function of the mediating variable does not need to be done. Perceived usefulness of e-wallets as a non-cash payment solution during the pandemic with the perceived ease of use that accompanies it does not make someone sure to using e-wallet applications. From the survey result to assess perceived usefulness can not mediating perceived ease of use to intention to use based on the research, it can be note that in general most of the respondents believe that the use of e-wallets is not the main factor in their using of e-wallet during the pandemic, because many transactions that still use cash and e-wallets have the same function as cash, even though there is a pandemic, but respondents say that now they are more maintaining health protocols, like washing hands.

## XII. CONCLUSION

Based on the result on this research and discussion, this research is summarized as follows:

1) Perceived covid risk has a positive effect on intention to use e-wallet product
2) Perceived ease of use has a positive effect on intention to use e-wallet product
3) Perceived ease of use has a positive effect on perceived usefulness
4) Perceived usefulness has a negative effect on intention to use e-wallet product
5) Perceived usefulness can not mediate the effect of perceived ease of use towards intention to use e-wallet product

## LIMITATION

1) Data sources tested in this study only came from questionnaires, so in subsequent studies to be able to use in-depth interviews in order to better dig up information about research.
2) The sample in Indonesia in this study is not exactly proportional in numbers. It is also very difficult to

pursue an exact proportion of gender, year of birth, and other demographical cohorts, especially if countries are taken into consideration.

3) This research investigating all generally e-wallet based non-bank better tobe more specificly one e-wallet brand.
4) This study only captured the intention to use e-wallets during COVID-19 pandemic. The insight could be better in the longitudinal study comparing before and after the pandemic. In addition, future studies are suggested to consider gender or educations background as moderating variables. It is believed that consumers from this group are more open to accept financial technology or innovation.

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