Examining the Determinants of Using e-Money Prepaid Software for Millennial Generation

Hesi Eka Puteri, Niyara Arinda, Cahya A. Mulyana, Deni O. Puspita, and Vira A. Husna

ABSTRACT

This study examined the importance of promotion and Perceived Ease of Use in the decision to use e-money prepaid software for the millennial generation in Indonesia. This study was quantitative research carried out through a field survey on some college students in West Sumatra province in Indonesia in 2021. Data were collected using a questionnaire that was distributed through Google Forms for 297 respondents and analyzed using Multiple Linear Regression. The finding has concluded that 51.6% of variations in the decision to use e-money prepaid software for young people could be explained by factors of promotion and Perceived Ease of Use. These two factors were strong predictors of the decision on using e-money for this consumer segment. Promotion and Perceived Ease of Use, both of them partially have a significant positive effect on consumer decisions to use e-money. This empirical finding has offered empirical evidence of consumer behavior by examining some predictors for the decision on the use of e-money for the millennial generation. This study recommends practical implications for some principals or e-money issuers to update the system so that they always highlight the "ease of use" principle for all users through the application which let users more easily find and use its features, adding to the features on the interesting list of merchants and various promotions.

Keywords: e-money, ease of use, promotion, the millennial generation.

I. INTRODUCTION

The advancement of the use of Electronic Money (e-money) as an innovative medium of exchange is an important topic of discussion in the digital economy era. Technological advances affect changes in people's behavior in transactions such as in the form of using e-money. The use of this digital payment is becoming increasingly popular, especially during the Covid-19 period, which limits people's mobility in various ways. The advantages offered by e-money make this digital-based service much more efficient than cash transactions using cash. The development of e-commerce with various attractive offers in various marketplaces on online shopping sites increasingly convinces customers that we have entered digital economics with the concept of a cashless society.

Central Bank of Indonesia noted an accelerated growth of financial transactions and the digital economy in line with increasing public acceptance of online shopping, the widespread use of digital payments, and also the acceleration of digital banking in Indonesia. The share of the use of electronic money in e-commerce transactions in 2020 was 41.71%, exceeding the share of using bank transfer methods and cash transactions which attained 20.32% and 19.01%, respectively. This market share growth was much greater than in previous years, which was 33.93% for 2019, 13.57% in 2018, and 12.47% in 2017. BI recorded growth in electronic money transactions of 52.5% year on year (YoY) (Bank Indonesia, 2021; Indonesia, 2022). This data implies that there is a fairly high increasing market share during the Covid-19 pandemic, which is concentrated in e-commerce transactions caused by the limited mobility of people in transacting.

From an economic perspective, the increase of usage of e-money is a good symptom in supporting the development of the digital economy. There is an update in the payment system that always follows the development of financial technology and the development of e-commerce itself. Previously, the public was introduced to the type of e-money card-based and issued by financial institutions, but now there are various e-money server-based which is dominated by Non-Bank Financial Institutions. Some of the main companies in this fintech in Indonesia are known by brands such as Go-Pay, OVO, ShopePay, DANA, and LinkAja. This e-money prepaid software service is more acceptable to the public in many developing countries than the e-money prepaid card, which has several limitations, such as requiring a specific reader, not being available for online shopping, and a complicated top-up process.

The trend of increasing usage of e-money is closely related to consumer behavior because the customer's decision to
adopt a product or service is a long process that starts from the need recognition stage, information search, evaluation of alternatives, and the decision-making process to use it. In the decision to use e-money, there are a group of people who base their decisions based on rational motives and others can be caused by the encouragement of emotional motives such as perceptions, beliefs, lifestyle, and other personal considerations. Theoretically, this decision is in line with the basic concept of consumer behavior which has stated that consumer behavior is influenced by many things which can be grouped into four things covering social, cultural, personal, and psychological factors (Philip Kotler & Armstrong, 2018; Schifflman, Kanuk, & Wisenblit, 2010). Some previous empirical studies have revealed various determining factors for customers in deciding to use a digital payment service. The interest in using e-money is influenced by promotions and the decision to use it will be higher when the provider continues to offer attractive promotions (Aji & Adawiyah, 2021; Dwi Putra, Astuti, Kusumawati, & Abdullah, 2020; Suryandari & Setyari, 2020). It was further emphasized that promotions that were not followed by perceived usefulness could cause customers to close their e-money use (Muhammad, Arifin, Eviatwi, & Sugiyanto, 2020).

Perceived ease of use (PEU) is another important determinant that determines decision-making to use e-money services. In the case of the use of chip-based e-money, a study has elaborated the importance of the concept of ease of use in the use of server-based e-money with customer decisions in adopting this service, especially in online shopping decisions (Iriani & Andjarwati, 2020). GoPay, a digital payment brand in Indonesia, claims on their website that one of the reasons for customer preference for using Go-pay is the ease of use of the service. Other studies revealed that perceived ease of use was closely related to the attitude towards behavior in e-money products (Logahan, Viliano, & Simamora, 2019; Pirdayanti & Wiagustini, 2021). Because of the importance of promotion and perceived ease of use, Setiawati & Falah, (2019) identified that there are at least six factors that determine the decreasing user’s activity of e-money, covering security and limited discount, explicit fees, networks, machine and update system unpredictable, confusing terms and conditions, and also the disadvantage of time and popularity. Although there is a presumption about the influence of perceived ease of use on decisions in adopting e-money, in several studies in cases of e-commerce, it was found that there were contra findings, where the two were not related (Gunawan, Ali, & Nugroho, 2019; Indriastuti & Wicaksono, 2014). Perceived Ease of Use has no significant effect on customer behavior in using it. Perceived Usefulness and Trust are the two main factors that influenced Millennials' acceptance of e-money applications in Jakarta (Indrawana, Livingstone, Kartonoc, & Sundjadiat, 2021). Implicitly, these previous studies imply that the determinants of the decision in using e-money services are not factors that work independently, but rather the influence of various factors that complement each other. These factors that influence the use of e-money can occur because of the relationship and the influence of interconnections in the form of linkages between one factor and other factors that are considered in consumer behavior. These two predictors, promotion and Perceived Ease of Use (PEU), are considered important as determinants of customer decisions in choosing e-money prepaid software considering the focus of analysis in this study is the millennial generation. This market segment contains people with simple, random, explorative, like something new, fintech literate, and usually like attractive promos. Millennials are not people who like to collect a lot of complicated chip cards like the previous generation. They tend to prefer practical things and prefer to do any transactions with their gadgets. Sometimes this customer segment is extremely aware of sales promotions, especially if the brand ambassador is a public figure they idolize. Promotion and perceived ease of use are considered two important things that will be considered compared to other predictors.

This research offers novelty in some aspects. This study explores more deeply the factors that influence the decision to adopt e-money prepaid software in the millennial generation segment in developing countries. This type of e-money is very popular with the millennial segment because this segment is the most literate with financial technology and e-commerce. Many providers rely on this segment as the main segment which is then expected to have a snowball effect on their families and the environment around them. This study analyzes people's behavior more deeply in using e-money prepaid software, the second generation of e-money products after the card, which was booming during the covid-19 pandemic. In contrast to the behavior in adopting card-based e-money, the determinants of the use of e-money prepaid software are more varied and this product is considered more acceptable for people in developing countries. The search results of previous empirical studies show that there are limited studies that have explored the behavior of using e-money prepaid software, especially in developing countries that have recently adopted this server-based e-money service. This study makes a policy contribution because business people, fintech developers, and policymakers are waiting for the presence of various studies on the behavior of e-money users for policymaking in the field of marketing and updating this digital payment system.

II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

A. Electronic Money (e-money)

E-money is the most effective way of transaction in the era of a cashless society. The meaning of e-money refers to as the monetary value stored electronically on devices such as a chip-card or a hard drive in a server, represented by a claim on the issuer, which is issued on receipt of funds for the purpose to pay for the transaction, and which is accepted by persons other than the issuer (Fung, Molico, & Stuber, 2014). Based on the recording mode of money in the electronic form, e-money can be categorized into two types, consisting of card-based products (chip-based) and software-based products. The card-based is an electronic purse or also known by other names such as e-money prepaid card and e-money card-based. This type of e-money is an electronic payment where the electronic value stored is in a card or chip (integrated circuit) and the working system of transferring funds is by inserting or swiping the card into a card reader.
Some products of this type of E-money can be found in Indonesia such as Mandiri E-Money, Brizzi BRI, BNI Tapcash BNI, and Flazz BCA. The second type, that is server-based e-money, is a type of e-money where the nominal value of the electronic money is stored and exists in a personal computer, and the work system for transferring funds can be done using the internet network. This type of e-money is also known as e-money Prepaid software (EPS) or e-money digital-cash or mobile-based e-money. This e-money prepaid software is claimed to provide more benefits, especially in terms of easiness, speed, and efficiency. There is no minimum amount of transaction and no security verification. In Indonesia, this type of e-money can be found in several brands such as Go-pay, OVO, T-Cash, ShoppePay, and others. Although Indonesia has been using e-money since 2007 with two product options covering chip-based and mobile-based, chip-based is not acceptable to many people because these transactions are mostly carried out in big cities such as toll road services, trains, supermarkets, and also require a card-reader available to use e-money prepaid cards. Because geographically, Indonesia consists of many islands scattered with various socio-economic conditions of the community, e-money prepaid software is more-appropriate to every individual through their handphone (Khatimah, 2016).

B. Customer Decision Making

Decision-making refers to a process that consists of several stages covering need recognition, information seeking, evaluation of alternatives before purchase, purchase action, consumption, and evaluation of alternatives after purchase (Engel, Blackwell, & Miniard, 1995; Hoyer, Macinnis, & Pieters, 2013). In the early stages, consumers are aware of a problem or need, which arises from the encouragement of internal and external factors. This encourages consumers to then look for information about products or brands that can meet these needs. This information search can be done through an active information search, such as visiting several stores directly to assess the characteristics and quality of the product, or through passive information-seeking through advertising searches in the media. After seeking as much information as possible about various things from several alternatives, the next step is to evaluate the existing alternatives from various similar offers and then determine the purchase decision. Basically, consumers will choose the brand or product that he likes the most (Puteri, 2020). Post-purchase behavior is related to consumer satisfaction and dissatisfaction after purchasing the product. The greater the gap between expectations and reality, the greater consumer dissatisfaction and vice versa. The possibility of consumers for being loyal will depend on their satisfaction which can then continue to be repurchased. Evaluation of alternatives at this stage of the buying decision process is when consumers use the information to evaluate alternatives in the choice set. The purchase decision at this stage of the buying decision process is when the consumer actually buys the product. Post-purchase behavior at the stage of the buying decision process is when consumers take further action after buying based on a sense of satisfaction or dissatisfaction.

C. Promotional Mix

The promotion has an important role in forming loyalty and the psychological link between the consumer and the product, the ad campaign, and the formulation of a sentence that builds loyalty to the product play a major role in the success of achieving the objectives of the promotion. Conceptually, promotion can be defined as a medium used by companies to inform, persuade and remind consumers directly or indirectly about the products or brands they sell. (Philip Kotler & Armstrong, 2018). The promotion can also be defined as a marketing activity involving the persuasion contact process through which the sender delivers a commodity, or service, or an idea, or a place, or a person, or a pattern of behavior for the purpose of influencing the particular audience minds, to appeal to their response behavioral about what promotes (Mualla, 2006). In line with promotion whose goal is to communicate messages to customers about the products or services offered by a company, there are several dimensions in the promotional mix covering Advertising, Sales Promotion, public relations, and personal selling (Keller & Kotler, 2010).

For companies that compete in monopolistic competition markets such as e-money prepaid software, promotions must be carried out aggressively to create customer awareness as well as attract them to purchase as much and as often as possible. Differences in product characteristics must be prioritized in promotion so that the advantages of the product can be remembered by the customer. The millennial generation is part of the most literate market segment with creative promotional tricks such as cashback, group discounts, birthday promos, weekend promos, and others. Several studies have analyzed the relationship between promotions and the decision to adopt digital payment services, especially e-money Prepaid Cards and most of them conclude that promotional activities have a significant influence on consumer behavior, or consumer loyalty, or on their purchasing decisions, although the effects of the various components may differ. The study of (Anugrah, 2020) has indicated that promotion and ease of use have a significant effect on customer satisfaction and customer loyalty, and hereafter customer satisfaction has a positive impact on customer loyalty. A qualitative study from (Dwi Putra et al., 2020) concluded that most of the demand for Link Aja, one of the e-money server-based brands in Indonesia, was due to several main reasons such as transaction convenience, product discounts, and security reasons. The study of (Aji & Adawiyah, 2021) has even offered a theoretical contribution to the literature by exploring how and why e-wallet payments are associated with excessive spending behavior among young adult consumers. This study extracted four keywords to affect young adults spending behavior, covering ease of use, promotions, self-control, and the illusion of liquidity. Interest in Using Electronic Money Interest is higher when the perception of risk is low, as well as when the e-money helps speed up transactions, increases productivity, and offers attractive promotions (Suryandari & Setyari, 2020).

Because of the importance of promotion, (Setiawati & Falah, 2019) emphasized the six factors that determine the decrease of e-money users activity in the transaction, consist of Security and limited discount, explicit fees, machine and update system unpredictable, networks, confusing term and condition, and also the disadvantage of time and popularity. Promotion that was not followed by perceived usefulness caused customers to close the use of e-money cards
(Muhammad et al., 2020). The formation of consumer behavior begins with a combination of promotions and needs, so that a perception of convenience and a perception of benefits which in the end can lead to an interest in using e-money.

D. Perceived Ease of Use

The concept of Perceived ease of use (PEU) has long been used in marketing research, which basically, refers to the extent to which a person believes that using a particular system will be free from complicated efforts. This is in line with the basic concept of the word ease which means "free from difficulty or high effort" (Radner & Rothschild, 1975). In the context of information technology, Perceived ease of use can be defined as a person's perception of the use of technology without any stress in understanding it, which will then influence the ease of use without requiring a lot of time allocation (Raza, Umer, & Shah, 2017). The concept of PEU is similar to self-efficacy which is defined as an assessment of how well a person can carry out the necessary actions to deal with prospective situations. The dimensions of perceived ease consist of ease to learn, ease to use, clear and understandable, and becoming skillful (Sun & Zhang, 2006).

The placement of PEU as a determinant in the decision to use online applications for public services has been implemented quite a lot in some research in the last decade and revealed a positive relationship between the two, as in the cases of e-government services. (Chen & Aklikokou, 2020; Mensah, Zeng, & Luo, 2020), social networks for transactions (Hansen, Saridakis, & Benson, 2018), e-learning system (Arunachalam, 2019; Sukendro et al., 2020), mobile banking (Mutahar, Daud, Thurasamy, Isaac, & Abdulsalam, 2018), and others. Applications that are perceived as easier will have higher acceptance because consumers will feel more satisfied if a product is easy, comfortable, and efficient to use.

In line with the increasingly widespread use of e-commerce applications on various online shopping sites, especially since the existence of Covid-19, some previous empirical studies have also analyzed the relationship between the ease of use factor and the decision to use e-money. Ease of Use is identified as one of the factors that affect customers' Intention to Use Card-based or server-based E-Money because online stores tend to prefer a guarantee of payment in advance before the product is sent. Cash on delivery facilities sometimes have a high risk of being uncollected by the courier. (Iriani & Andjarwati, 2020) revealed that there is a significant relationship between PEU and online shopping decisions, for reasons of safety risks during the covid-19 pandemic. In a study with the case of OVO users, one of the e-money server-based, it was found that PEU has a positive effect on fintech usage of financial technology services (Pirdayanti & Wiagustini, 2021). Likewise in the case of e-money "SAKUKU" it was found that perceived ease of use has a positive influence on the attitude towards behavior (Logahan et al., 2019). These findings are also confirmed by GoPay user research, which was uploaded on the official GoJek blog as the provider, which states that one of the reasons customers prefer to use GoPay is the ease of use of the service. Another study also considers that to increase the fintech adoption rate, customer trust should be built.

Perceived ease of use (PEU) and promotion are two important things that can affect customer trust (Nangin, Barus, & Wahyoedl, 2020).

Although there is a presumption about the influence of PEU on purchase decisions, in some studies in the case of industrial e-commerce, it was found that there were contra findings, where the two were not related. (Gunawan et al., 2019; Indriastuti & Wicaksono, 2014). PEU has no significant effect on customer behavior in using it, and Perceived Usefulness and Trust are the two main factors that influenced Millennials' acceptance of e-money applications in Jakarta (Indrawana et al., 2021). The inconsistency of these previous empirical studies requires deeper elaboration to be analyzed, especially for the millennial generation market segment which is suspected to be the largest segment that uses various transactions. The behavior in this segment is a bit unique because the characteristics of the younger generation are random and exploratory in various ways, not only on the behavior of using e-money but also on other behaviors in making decisions to consume a certain product or service.

Based on literature review and foregoing discussion about inconsistencies from the previous empirical, the hypothesis is arranged as follows:

H1. Promotion will have a positive effect on choosing e-money prepaid software.
H2. Perceived ease of use (PEU) will have a positive effect on choosing e-money prepaid software.

III. Method

This study was confirmatory research that discussed the causal relationships between promotion and Perceived ease of use (PEU) on the decision to use e-money prepaid software among millennials, and then tests of hypotheses that have been formulated. This study was field research with a quantitative approach which was conducted at three cities in the province of West Sumatra, Indonesia in 2021, where these three cities are centers of the student. The cross-sectional data were used in this study to test how far promotion and perceived ease of use affect the millennial generation in decision making in using e-money prepaid software.

A. Population and Sample

The population of this research was students who live in three big cities in the province of West Sumatra, Indonesia, covering the cities of Padang, Bukittinggi, and Payakumbuh. The population in this study are customers who are relevant to the research needs with the category of those who are in the millennial generation segment which is suspected to be the largest segment that uses e-money. These cities were chosen with the consideration that in these three cities there are several universities and have good access to server-based e-money services. The sample was selected purposively by selecting respondents according to research needs, that is the college student who is in the millennial generation group. The primary data in this study
were obtained by using a questionnaire distributed through Google Form. The number of samples is determined by referring to the criteria (Rao, 2012) which require the availability of at least 97 respondents for each selected case (significance level of 5% and maximum margin of error 10%). Based on the 320 questionnaires distributed, there were 297 questionnaires declared statistically feasible, so the response rate for this study was 92.81%. This number is more than 75% of the total respondents and this is declared to be statistically appropriate for population generalization.

B. Variables and Measurements

The dependent variable in this research is the decision on usage for e-money prepaid software with two predictors of variables covering promotions and perceived ease of use. Even though these three variables are popular determinants in consumer behavior theory (Keller & Kotler, 2010; P Kotler & Armstrong, 2008; Schiffman et al., 2010), the use of the indicators for each of these variables were developed in accordance with research needs and research object. To measure variables in the model, respondents are asked for their opinions using a five-point scale, ranging from strongly disagree to strongly agree on thirteen questions. To ensure that the formative indicators that have been extended are suitable to be applied in the model, the data quality test is carried out completely by looking at the normality, validity, and reliability test. The establishment of instruments for each variable in the model refers to the concept of consumer behavior.

The variable of promotion is measured by four indicators that refer to the basic concept of consumer behavior (Keller & Kotler, 2010; P Kotler & Armstrong, 2008; Mualla, 2006; Schiffman et al., 2010), and also some propositions from some studies about the promotional mix about fintech adoption (Acelian & Basri, 2021; Nangin et al., 2020). Some formative indicators used in measuring promotional objectives consist of advertising, personal selling, sales promotion, publicity, and public relations. Perceived Ease of Use (PEU) is measured by four indicators developed from the initial concept of consumer behavior (Sun & Zhang, 2006), studies about PEU in usage e-money (Acelian & Basri, 2021; Gunawan et al., 2019). The indicators for this variable are covering Ease to Learn, Ease to Use, clear and understandable, and becoming skillful. Next, decision making in using e-money can be derived based on the basic concepts of consumer behavior in marketing management studies (Keller & Kotler, 2010; P Kotler & Armstrong, 2008; Schiffman et al., 2010), and also the diversity of various previous empirical studies that have been widely used in elaborating the usage to adopt financial technology (Mohd Thas Thaker, Allah Pitchay, Mohd Thas Thaker, & Amin, 2019; Nangin et al., 2020). Measurement indicators for using e-money, covering problem recognition, information search, evaluation of alternatives, purchase decision, and behavior after purchase.

C. Analytical Method

To measure the effect of promotion and Perceived ease of use (PEU) on customer decisions using e-money prepaid software, the analytical method that is suitable to be implemented is multiple linear regression. The independent variable in this study is the consumer's decision to use e-money prepaid software, while the independent variables used are variables of promotion and Perceived ease of use (PEU), which are important predictors in the study of Consumers Behavior. The multiple linear regression model equation for this estimation model can be formulated as follows:

\[ Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \varepsilon \]

\( Y \) is Usage decision of e-money prepaid software, \( X_1 \) is Promotion, \( X_2 \) is Perceived ease of use (PEU), and \( \beta_1 \) is parameter estimation, and \( \varepsilon \) is error terms.

Causality analysis with Multiple Linear Regression was carried out with a few stages of testing the model applied. First, at the measurement model analysis stage, data quality testing is done by assessing reliability and validity. To measure the validity of the instrument items and ensure internal consistency, the validity test method used is Pearson's Product Moment Correlation, namely by ensuring that the correlation value between items meets statistically. Furthermore, to ensure the reliability of the research instrument, the reliability analysis is assessed by Cronbach alpha. Second, to ensure that the ordinary least squares (OLS) analysis used fulfills the basic assumptions that meet the regression model with the criteria of BLUE (Best Linear Unbiased Estimator) and is statistically feasible, normality, multicollinearity, and also heteroscedasticity tests are applied in data management. The normality test method used is the One-Sample Kolmogorov Smirnov (K-S) method. To determine whether there is heteroscedasticity, the Glejser test is carried out by regressing the independent variable to the absolute residual value. In this study, to determine whether there is a multicollinearity problem, the VIF (variance inflation factory) and Tolerance values can be used as a guide. Third, hypothesis testing is carried out by evaluating the results of the analytical model using the F test, t-test, and R². F-test was conducted to ascertain whether all independent variables included in the regression model had a simultaneous effect on the dependent variable. The results of the t-test are basically used to measure how deep the influence of the independent variable individually on the dependent variable is while the determinant test (R²) aims to measure how far the model's ability to explain the influence of the independent variable on the variation in the achievement of the dependent variable.

IV. RESULT AND DISCUSSION

A. Overview of E-Money Prepaid Software (EPS)

The more advanced a country is, the limited mobility due to COVID-19 and also the increasing number of superior features of non-cash transactions, have led the Indonesian people to move towards a cashless society through server-based e-money service products. As of March 2019, the Central Bank of Indonesia claimed that there were 36 server-based electronic money issuers. The e-Channel Fintech E-Commerce & e-lifestyle survey conducted by Sharing Vision in December 2020 involving 1729 respondents of e-money users in Indonesia revealed that GoPay is the most e-money used by the public, which was then followed by OVO,
ShopePay, and DANA. Most of the e-money prepaid software is dominated by publishers from non-bank financial institutions. GoPay is a digital payment affiliated with the GoJek application, a ride-hailing service base that has been operating since 2010 under the management of “PT Application Karya Anak Bangsa”. Initially, e-money was used as a medium for paying for services offered on GoJek such as Go-Ride, Go-Car, Go-Food, Go-Send, Go-Mart, and others, but over time this e-money can access more from 20 services and can be accepted at various merchants both online and offline. This e-money is very familiar because it is offered with various supporting services that make it easier for users such as the top-up process which can be carried out in various versions such as through e-banking, through GoJek drivers, and also through channeling at supermarkets.

B. Descriptive Analysis

The following Table I shows the frequency distribution of the characteristic Demographic information of respondents in the study.

| Characteristic       | Description | Frequency | (%)  |
|----------------------|-------------|-----------|------|
| Gender               | Male        | 99        | 33.33|
|                      | Female      | 198       | 66.67|
|                      | Total       | 297       | 100.00|
| Age (Years)          | <19         | 14        | 4.71 |
|                      | 19-21       | 87        | 29.29|
|                      | >21         | 196       | 65.99|
|                      | Total       | 297       | 100.00|
| Pocket Money (IDR per month) | ≤ 1,000,000 | 64 | 21.55 |
|                      | 1,000,001 - 2,000,000 | 121 | 40.74 |
|                      | 2,000,001 - 3,000,000 | 68 | 22.90 |
|                      | 3,000,001 - 4,000,000 | 29 | 9.76 |
|                      | >4,000,000  | 15        | 5.05 |
|                      | Total       | 297       | 100.00|

Based on the table above, it was identified that 66.67% of the 297 respondents in this study were women. Most of the respondents are students who are in the age range greater than 21 years and have pocket money in the range of 1,000,001 - 2,000,000 IDR per month.

C. Testing of Normality, Multicollinearity, and Heteroscedasticity

To fulfill a data quality test, the estimation model with OLS requires the fulfillment of the classical assumptions, covering normality, multicollinearity, and heteroscedasticity. The results of the normality test showed that the data were normally distributed. The value of One-Sample Kolmogorov-Smirnov is 1.285 (p-value = 0.074), and this proves that the residual value generated from the regression is normally distributed and this regression model meets the assumption of normality for further analysis. To ensure that there is no definite linear relationship between the independent variables in the model, multicollinearity analysis using VIF (variance inflation factor) and Tolerance is implemented. The test results show the Variance Inflating Factor (VIF) values for the Promotion and also for Ease which are 2.372 (Tolerance values = 0.422). This value is smaller than the maximum tolerance limit of VIF of 10.00. Thus, it can be concluded that there is no multicollinearity in the model. Thus, the estimation results are free from the multicollinearity symptoms.

Furthermore, to ensure that the regression model does not have symptoms of heteroscedasticity, the Glejser test is applied in this model, by regressing the independent variable to the absolute residual value. The results of the heteroscedasticity test by assessing the regression coefficient for the residual of the variables in the model. To interpret the results of the Glejser test, the significance value for each of the estimation coefficients in the model can be observed, 0.501 and 0.506, respectively. None of these significance values are below 0.05 or statistically significant. Thus, it can be concluded that the heteroscedasticity symptom is not present in the estimation model. Thus, there are no variance and residual inequalities for all observations in the linear regression model in this study.

D. Testing Validity and Reliability

The results of the reliability and validity tests for the instrument items in the questionnaire are shown in Table III.

To ensure the degree of consistency among respondents’ answers, a reliability test was conducted, as in Table III, and the result of Cronbach's alpha for each variable in the model meets statistical feasibility. Hair, Anderson, Tatham, & William, (1998) stated that a variable is categorized as reliable if the Cronbach Alpha value > 0.60 exceeds the
minimum value of 0.6. Thus, the constructs measured were statistically reliable and acceptable for further regression analysis. Instrument items are also statistically valid because the Corrected Item Total Correlation exceeds 0.3.

E. Results of the Multiple Linear Regression

All test results from the causal relationships between Promotion, Ease of Use, and Usage Decision can be shown in Table IV.

| TABLE IV: RESULTS OF MULTIPLE LINEAR REGRESSION |
|-----------------------------------------------|
| Model                                    | Unstandardized Coefficients | Standardized Coefficients | t     | Sig.  |
|-------------------------------------------|-----------------------------|---------------------------|-------|------|
| (Constant)                                | 2.485                       | 1.242                     | 2.00  | 0.046|
| Promotion                                 | 0.406                       | 0.092                     | 0.275 | 4.422| 0.000|
| Perceived Ease of Use                     | 0.713                       | 0.091                     | 0.489 | 7.858| 0.000|
| a. Dependent Variable: Usage Decision.   |                             |                           |       |      |

Based on the Results of Linear Regression above, a functional equation can be formulated as follows:

\[ Y = 2.485 + 0.406X_1 + 0.713X_2 + \varepsilon \]

Note: Y is Usage Decision of e-money prepaid software, X_1 is promotion, X_2 is Perceived Ease of use (PEU), \( \alpha \) is constant, \( \beta \) is estimation coefficient and \( \varepsilon \) is Error term

F. Testing of Hypotheses

Simultaneous regression test results (F-Test) show the F-test value is 159.090 (Sig. 0.000), as shown in the ANOVA test results in Table V. These results ensure that all independent variables included in the model have a simultaneous effect on the dependent variable, so that the regression model used is correct and can be used to predict further.

| TABLE V: RESULTS OF F-TEST |
|-----------------------------|
| Model                      | Sum of Squares | df | Mean Square | F     | Sig.   |
| Regression                 | 150.822        | 2  | 75.411      | 159.090| 0.000^ |
| Residual                   | 139.360        | 294| 0.474       |       |       |
| Total                      | 290.182        | 296|             |       |       |
| a. Dependent Variable: Usage Decision. |     |     |             |       |       |

Furthermore, the results of the t-test in Table IV also show the feasibility of the estimated coefficient in the model, which is the basis for measuring the influence of the independent variable individually on the dependent variable. Based on Table IV, it can be concluded that the estimation coefficient for the promotion variable (X_1) is 0.406 (p-value = 0.000), so it can be concluded that promotion has a positive and significant effect on consumer decisions to use e-money. The estimated coefficient value for the Perceived Ease of Use (X_2) variable is 0.713 (p-value = 0.000), which means that partially the ease of effect also has a significant positive effect on consumer decisions to use e-money.

To measure how far the predictors in the model, promotion, and ease of use, can explain variations in usage decision variables, the R^2 value can be guided. The results of data processing show that the coefficient of determination (R^2) is 0.520 and adjusted R Square is 0.516. To avoid inaccuracies in predicting the effect of independent variables on the dependent variable, and adjusted R Square, which is 0.516 can be used. This means that the ability of promotion and Perceived Ease of Use in explaining the variation in the achievement of the usage decision of e-money is 51.6%, and the remaining 48.4% is influenced by other variables not analyzed in this model.

| TABLE VI: RESULTS OF R-SQUARE |
|-------------------------------|
| Regression Model              | R Square | Adjusted R Square | Std. Error of the Estimate |
|--------------------------------|----------|-------------------|---------------------------|
| F-test                        | 0.721*   | 0.520             | 0.516                     | 0.688                  |
| a. Predictors: (Constant), Promotion, Perceived Ease of Use. |       |                   |                           |
| b. Dependent Variable: Usage Decision. |       |                   |                           |

G. Discussion

Based on the above result, it can be concluded that the direct effect of promotion on the decision-making in using e-money is 0.406 (p-value = 0.000). The first hypothesis is H1. Promotion will have a positive effect on choosing e-money prepaid software, it is acceptable. The increasing of Promotion can upgrade the achievement of using e-money prepaid software for the millennial generation. The positive influence of Perceived Ease of Use (PEU) on decision-making in using e-money is also observed through the estimated coefficient value of 0.713 (p-value = 0.000). So that's it, H2. Perceived ease of use (PEU) will have a positive effect on choosing e-money prepaid software, which is also acceptable. With these findings, it can be ascertained that there is a direct influence between Promotion and PEU on the decision-making in using e-money prepaid software for the millennial generation.

This study reinforces the previous findings of the relationship between promotion and the decision making in using e-money (Dwi Putra et al., 2020; Muhammad et al., 2020; Setiawati & Falah, 2019; Suryandari & Setyari, 2020). Through this empirical study, this phenomenon has been analyzed in more detail in the case of e-money prepaid software, especially among the millennial generation, which is suspected to be the main market for this type of e-money product. This study of course enriches studies in the field of consumer behavior, because this phenomenon is very booming at this time since covid-19. Evidence among the millennial generation is always interesting to discuss because this digital payment market segment is very close to the world of young people who are very attractive and Fintech literate.

This finding has examined the application of the basic theory of marketing about the importance of promotion in any business. The promotion carried out on the e-money prepaid software business aims to create brand awareness for customers, especially the millennial group who are very literate with information technology, so that they are familiar with the promoted e-money products. When brand awareness has emerged, promotional activities are useful for building a positive and strong brand image so that consumers can prefer certain e-money products over existing competitors. Besides aiming to educate new consumers, promotions are also useful for increasing consumer loyalty, especially for loyal consumers so as not to switch to other competitors. The e-money prepaid software product is one of the digital payment service products that is experiencing rapid development and tends to compete in the monopolistic competition market. In
this type of market, promotion is an attempt to outperform market share.

The findings of this study are also in line with previous empirical findings, which identified the importance of Perceived Ease of Use (PEU) with consumer decisions to use e-money (Logahan et al., 2019; Pirdayanti & Wiagustini, 2021). Elaborating previous empirical studies on different research focuses makes these findings enrich the existing empirical studies, so that there is the development of consumer behavior theory, especially for certain products or special market segments. This finding confirms the importance of ease of use in building consumer trust. The excellent relationship between Perceived Ease of Use (PEU) and consumer millennial decisions to use e-money has implications for strategies that must be taken by fintech e-money businesses to accelerate policies in improving the quality of prepaid electronic money (e-money) services software, for example, enriches transaction features, simplifies the application operating system, expands the network, makes filing complaints easy, and others. All of these convenience offers will of course have an impact on creating trust and customer loyalty in using a particular e-money product.

V. CONCLUSION

This finding has revealed that promotion and Perceived Ease of Use are predictors of the decision to use e-money prepaid software in the millennial market segment. The better the promotions carried out by e-money service providers, the greater the decision of millennial users to use e-money prepaid software. Likewise, for perceived ease of use, which has a positive effect on the decision to use this e-money prepaid software. This finding has practical implications for policy-makers, especially for some investors and principals or e-money issuers to develop related products and diversify similar products in the development of e-commerce and financial technology. In addition to carrying out attractive promotions through advertisements, it is important to update the system so that it is always easy to use and makes it easier for users through the features developed. Future development should be directed at improving the design of the e-money application to let users more easily find and use its features, adding to the features on the list of merchants and various promos. For future research, it is highly recommended to further elaborate these findings by diversifying some of the other predictors not discussed in this study, which of course will enrich relevant studies in the field of consumer behavior, especially to find the driving factor for millennial customers in adopting e-money prepaid software service.

REFERENCES

Acelian, R. M., & Basti, H. A. (2021). Analysis of Sales Promotion, Perceived Ease of Use and Security on Consumer Decisions to Use DANA Digital Wallet. International Journal of Innovative Science and Research Technology, 6(1), 1436-1441. Retrieved from https://ijisrt.com/assets/upload/files/IJISRT21JAN662.pdf.

Aji, H. M., & Adiwiyah, W. R. (2021). How e-wallets encourage excessive spending behavior among young adult consumers? Journal of Asia Business Studies.

Anugrah, F. T. (2020). Effect of Promotion and Ease of Use on Customer Satisfaction and Loyalty on OVO Application Users. Quantitative Economics and Management Studies, 1(1), 44–50.

Arunachalam, T. (2019). Influence of Quality On Behavioural Intention Among Employees Towards An E-Learning System. Journal of Organisation & Human Behaviour, 8(4).

Bank Indonesia. (2021). Laporan Tahunan Bank Indonesia 2020. Central Bank of Indonesia.

Chen, L., & Alikikou, A. K. (2020). Determinants of E-government adoption: testing the mediating effects of perceived usefulness and perceived ease of use. International Journal of Public Administration, 43(10), 850–865.

Dwi Putra, H., Astuti, S., Kusumawati, A., & Abdillah, Y. (2020). Knowing the Reasons of Using E Money Linkaja in Indonesia. Talent Development & Excellence, 12(3s), 242–250. Retrieved from http://www.iratde.com.

Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1995). Consumer Behavior. The Dryden Press Fort Worth, TX.

Fung, B., Molico, M., & Stuber, G. (2014). Electronic money and payments: Recent developments and issues. Bank of Canada Discussion Paper.

Gunawan, F., Ali, M. M., & Nugroho, A. (2019). Analysis of the Effects of Perceived Ease of Use and Perceived Usefulness on Consumer Attitude and Their Impacts on Purchase Decision on PT Tokopedia In Jabodetabek. European Journal of Business and Management Research, 4(5), 1–6. https://doi.org/10.24018/ejbmnr.2019.4.5.100.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Williams, C. (1998). Multivariate data analysis. Upper Saddle River, NJ: Prentice Hall.

Hansen, J. M., Saridakis, G., & Benson, V. (2018). Risk, trust, and the interaction of perceived ease of use and behavioral control in predicting consumers’ use of social media for transactions. Computers in Human Behavior, 80, 197–206.

Hoyer, W. D., Macinnis, D. J., & Pieters, R. (2013). Consumer Behavior (Sixth Edit). South-Western, Cengage Learning.

Indrawana, M. R., Livingstone, D., Kartonoc, R., & Sundjadiat, A. M. (2021). Factors Affecting Millennials’ Acceptance of E-Money Application in Jakarta. Turkish Journal of Computer and Mathematics Education, 12(3), 4146–4156. https://doi.org/10.17762/turcomat.v123.1706.

Indriastuti, M., & Wicaksono, R. H. (2021). The Reasons of Using E Money Linkaja in Indonesia. Talent Development & Excellence, 12(3s), 242–250. Retrieved from http://www.iratde.com.

Kotler, P. W. (1995). Principles of Marketing. Prentice Hall.

Khatimah, H. (2016). Consumers ‘ Intention To Use E Money Linkaja in Indonesia. Talent Development & Excellence, 12(3s), 242–250. Retrieved from http://www.iratde.com.

Kotler, Philip, & Armstrong, G. (2018). Principles of Marketing. Seventeenth Edition. In Pearson.

Logahan, J. M., Viliano, M., & Simamora, B. H. (2019). Factors affecting intention to use “Sakuku” e-money of generation Y in Indonesia. Journal of Theoretical and Applied Information Technology, 97(20), 2368–2375.

Mensah, I. K., Zeng, G., & Luo, C. (2020). E-government services adoption: an extension of the unified model of electronic government adoption.
Mohd Thas Thaker, M. A. Bin, Allah Pitchay, A. Bin, Mohd Thas Thaker, H. Bin, & Amin, M. F. Bin. (2019). Factors influencing consumers’ adoption of Islamic mobile banking services in Malaysia. Journal of Islamic Marketing, 10(4), 1037–1056. https://doi.org/10.1108/JIMA-04-2018-0065.

Mualla, N. (2006). The origins of Marketing. In Jordan: Wael Foundation for printing.

Muhammad, A., Anfin, N., Eviatiwi, &, & Sugiyanto, K. (2020). Disclosing The Conduct of Using E-Money In Semarang City. Journal of Research in Business, Economics, and Education, 2(5), 974–984. Retrieved from https://e-journal.stie-kusumangra.ac.id/index.php/jrbee/article/view/143.

Mutahar, A. M., Daud, N. M., Thurasamy, R., Isaac, O., & Abdulsalam, R. (2018). The mediating of perceived usefulness and perceived ease of use: the case of mobile banking in Yemen. International Journal of Technology Diffusion (IJTD), 9(2), 21–40.

Nangin, M. A., Barus, I. R. G., & Wahyoedi, S. (2020). The Effects of Perceived Ease of Use, Security, and Promotion on Trust and Its Implications on Fintech Adoption. Journal of Consumer Sciences, 5(2), 124–138. https://doi.org/10.29244/jcs.5.2.124-138.

Pirayanti, S. M. N., & Wiagustini, P. L. N. (2021). The Influence of Perceived Risk , Perceived of Usefulness , and Perceived Ease of Use on the use of Financial Technology. American Journal of Humanities and Social Sciences Research (AJHSSR), (5), 428–436.

Puteri, H. E. (2020). Social Performance of Rural Bank : Impact of Commercialization Factors. Jurnal Dinamika Manajemen, 11(1), 115–125. https://doi.org/10.15294/jdm.v11i1.23091.

Radner, R., & Rothschild, M. (1975). On the allocation of effort. Journal of Economic Theory, 10(3), 358–376.

Rao, P. (2012). Measuring consumer perceptions through factor analysis. The Asian.

Raza, S. A., Umer, A., & Shah, N. (2017). New determinants of ease of use and perceived usefulness for mobile banking adoption. International Journal of Electronic Customer Relationship Management, 11(1), 44–65.

Schiffman, L. G., Kanuk, L. L., & Wisenblit, J. (2010). Consumer Behavior. Tenth Edition. Pearson.

Setiawati, C. I., & Falah, N. (2019). E-Money Challenge in Disruption Era: Uncovering the Dilemma Issues from Consumers’ Perspective. Sustainable Business and Society in Emerging Economies, 1(2), 109–122.

Sukendro, S., Habibi, A., Khairuddin, K., Indrayana, B., Syahruddin, S., Makadada, F. A., & Hakim, H. (2020). Using an extended Technology Acceptance Model to understand students’ use of e-learning during Covid-19: Indonesian sport science education context. Heliyon, 6(11), e05410.

Sun, H., & Zhang, P. (2006). Causal Relationships between Perceived Enjoyment and Perceived Ease of Use: An Alternative Approach. Journal of the Association for Information Systems, 7(9), 618–645. https://doi.org/10.17705/1a0is.00100.

Suryandari, K. K., & Setyari, N. P. W. (2020). Determinants of interest in using electronic money in Indonesia: evidence from Denpasar, Bali. Journal of Socioeconomics and Development, 3(2), 126–133.