



## The Effect of perceived Benefits, Ease of Use and Security on the Intention to Use the Dana Application

Muhammad Iqbal Fahlepi<sup>1</sup>, Roslina<sup>2</sup>, Nurul Husna<sup>3</sup>

<sup>1,2,3</sup> University of Lampung, Indonesia

Corresponding Author :  [muhammadiqbalfahlepi@gmail.com](mailto:muhammadiqbalfahlepi@gmail.com)

### ABSTRACT

In this era of globalization, technology is developing rapidly in all aspects, including the economic aspect. Changes in payment transactions using currency are now starting to be replaced by electronic money. There is a lot of electronic money that is present in the community, one of which is the Dana Application. This is something new among the public so that people are still questioning the benefits, convenience and security of the Dana Application, because when using it transactions are inefficient because when using the Dana Application there are difficulties and transaction security is not guaranteed. The research method used is quantitative, namely a process of finding knowledge that uses data in the form of numbers as a tool to analyze information about what you want to know. In this study using a questionnaire with a Likert scale. The population in this study were Dana Application users and 120 samples were used as a research sample. The results of this study indicate that Perceived Usefulness (X1) has a positive and significant effect on Intention to Use (Y), Ease of Use (X2) has a positive and significant effect on Intention to Use (Y), Safety (X3) has a positive and significant effect on Intention to Use (Y).

*Perceived Benefits, Ease of Use, Security, Intention to Use*

### ARTICLE INFO

#### Article history:

Received

15 May 2023

Revised

25 June 2023

Accepted

01 August 2023

#### Key Word

#### How to cite

#### Doi

<https://pusdikra-publishing.com/index.php/jecs>

[10.51178/jecs.v5i2.1462](https://doi.org/10.51178/jecs.v5i2.1462)



This work is licensed under a  
[Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)

## INTRODUCTION

The era of globalization that occurs at this time makes technological developments faster, many changes have occurred both from the fields of industry, agriculture, economy. The rapid development of technology in the community is realized by many activities carried out only through the palm of the hand. For aspects of life, technology facilitates some human activities which certainly create new patterns in daily activities. As in terms of communicating with technology, humans can convey and disseminate information quickly and precisely. In addition to communicating, technology can also facilitate education, transportation, and the economy.

The development of digital technology is marked by the increasing use of devices and the internet, almost everything from children to adults can now access it. According to the survey results from the Indonesian Internet Service Providers Association (APJII) for the period 2022 – March 2023, the number of internet users in Indonesia reached 215 million people. This number increased by 5 million people compared to the previous year period of 210 million people or an increase of 2.67%.

The development of digital technology has changed people's behavior. These changes are marked by changes in the field of financial services that have evolved from time to time. Such payments were initially made directly by carrying cash and can now be done using devices to make payments quickly and reduce the risk of theft and circulation of counterfeit money. This is one effective way for the community because currency has constraints in terms of efficiency.

Technological changes have encouraged the development of digital technology-based businesses, one of these developments is the emergence of electronic money payment instruments or called E-money which can facilitate all community activities in terms of finance. Electronic money (Bank Indonesia, 2020) is defined as a means of payment in electronic form where the value of money is stored in certain electronic media. Users must first deposit their money with the publisher and store it in electronic media before using it for transaction purposes. Therefore, developments with the development of non-cash payments have received serious attention from Bank Indonesia considering the development of non-cash payments is expected to reduce the burden of using cash and be more efficient in transactions. Bank Indonesia as the central bank of Indonesia issued a payment system policy through electronic payment instruments or known as electronic money (E-money) in 2009.

On 14th August 2014, Bank Indonesia established the "National Non-Cash Movement" (GNNT) as strengthened by Bank Indonesia Regulation No. 18/17/PBI/2016 on E-money, stating that in order to enhance and support financial inclusion, the use of electronic money through digital financial services needs to be increased and streamlined. This is to encourage the community to become a Less Cash Society (LCS) to minimize risks that can harm the community such as criminal acts of theft and counterfeit money. Digital transaction activities using the debit system can also use electronic money.

The E-money product itself has two payment systems, namely the first prepaid card using a chip-based physical card and the second e-wallet based

on a server in the form of an application. Consumers can use e-money services only by attaching a card to make transactions if using a prepaid card or can do a scanner when using the e-wallet application on the sensor provided by e-money issuers to merchants which provides electronic money payment instruments, after that the payment transaction will automatically succeed with the deduction of the balance on the card or e-wallet but the transaction will fail if the balance is insufficient.

E-money has several advantages that can be enjoyed by users, namely, E-money can minimize the circulation of counterfeit money, because every transaction that uses e-money, both merchants and users do not need to think about the cash that will be given or returned, because the system will immediately cut the user's or merchant's balance according to the amount of transactions paid through barcode scans. In addition, it makes it easier to find transaction history that has been automatically stored in the application with the transaction recording feature, this helps users track every income or expense transaction faster, easier and more efficiently.

In Indonesia, the use of e-money has grown rapidly and the number of users always increases from year to year. This is evidenced by the increasing volume and value of e-money transactions in Indonesia. Transaction data can be seen in Table 1.

**Table 1.**  
**Electronic Money Transaction Data During the 2017-2021 Period**

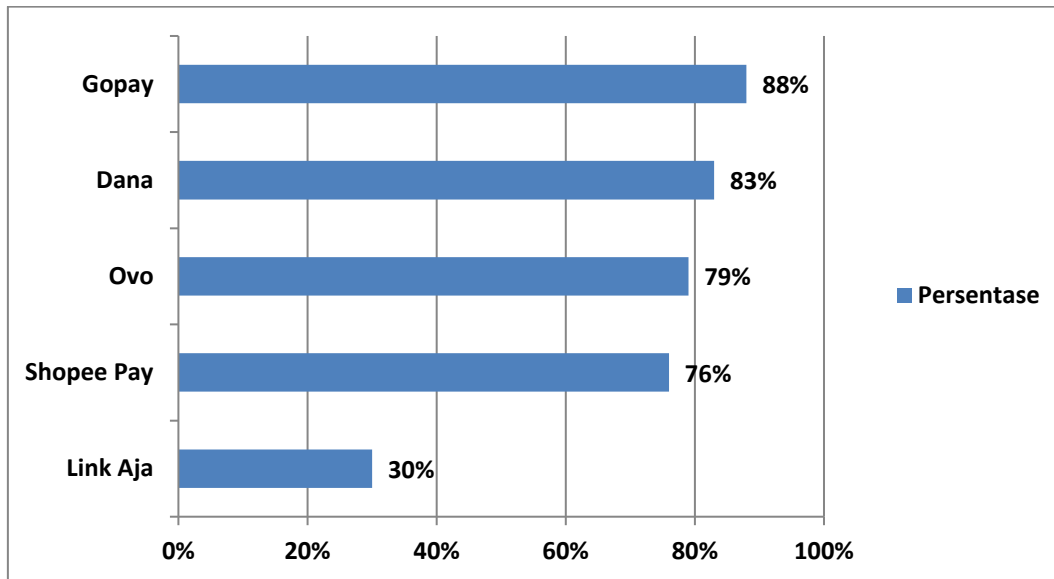
Year	Transaction Value (Rp)	Change In (%)	Transaction Volume	Change in (%)
2017	12.375.468.720	-	943.319.933	-
2018	47.198.616.110	(+) 281%	2.922.698.905	(+) 210%
2019	145.165.467.600	(+) 208%	5.226.699.919	(+) 79%
2020	227.044.329.053	(+) 56%	5.064.751.353	(-) 3%
2021	283.691.131.540	(+) 25%	5.449.400.276	(+) 8%

Source : Bank Indonesia (2023)

From the data above, it can be concluded that the need and use of e-money every year always increases and does not rule out the possibility that if more and more access is given to the ease of Scanning Barcode e-money to every consumer and providing good education to the public about the benefits of using e-money, there is no rule out the possibility that if e-money continues to grow, the many conveniences and benefits it has will be a priority in the community in making payments.

In Indonesia there are several companies that offer e-money. E-money itself is issued by banks and financial companies based on applications /

servers. E-money issued by banks are Brizzi from BRI bank, Emoney Mandiri from Mandiri bank, and Flazz from BCA bank. While E-money is issued by financial companies, such as Gopay from Gojek, Shopee Pay from Shopee and DANA.



Picture 1.

### Popular E-money in Indonesia in 2022

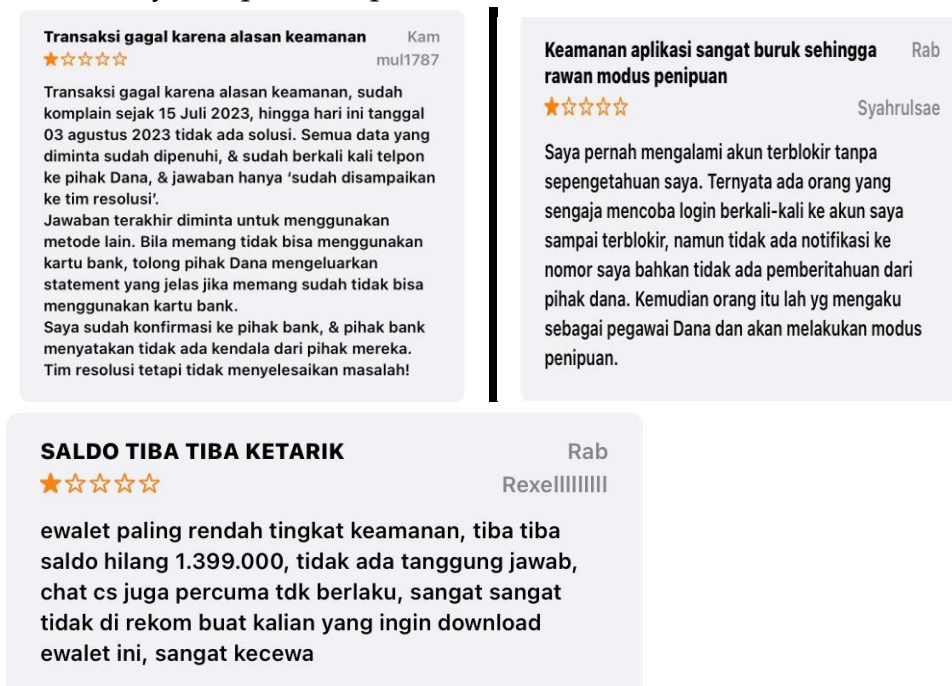
Source : Populix (2023)

Based on the Populix survey, the first position is occupied by Gopay with a percentage of 88%, the second position is occupied by Dana with a percentage of 83%, the third position is occupied by Ovo with a percentage of 79%, the fourth position is occupied by Shoope Pay with a percentage of 76% and the last position is occupied by Link aja with a percentage of 30% (Populix, 2022).

Dana Application is a digital wallet service organized by PT Espay Debit Indonesia Koe, an Indonesian startup company engaged in financial technology that provides payment infrastructure that allows Indonesians to make cashless and non-card payments and transactions. DANA has been present in Indonesia since 2017, but was only officially launched on November 5, 2018 by implementing open-platform services, meaning that funds can be used in various different platforms both offline and online. This open platform concept, in addition to being able to connect with various other forms of payment instruments, DANA can also be utilized by various sectors, including education, public services, social services, to street vendors. DANA can also be used on several platforms and applications such as Bukalapak, TIX ID, and BBM, and will be present in various other merchants.

E-money aims to make it easier for people to carry out all kinds of economic transactions, especially for small-scale transactions. However, there are still several shopping centers or minimarkets that have not become merchants or partners of e-money, causing some people to still be less interested in using e-money because it is still less effective and efficient in its use. Therefore, it can be a problem when the product is not accompanied by product knowledge. Therefore, it is necessary to socialize and educate about how to safely use and store E-money both through print and electronic media in the form of attractive advertisements. No less important is the existence of true, clear and honest information from e-money issuers about partners who can accept the use of e-money in all trading place transactions or only certain places.

The large number of human needs for digital transactions will also increase the security threats that will occur. This security factor is the most important factor in conducting digital transactions. According to G. J. Simons (in Chazar, 2015) information system security is how we can prevent fraud (cheating) or, at least detect fraud in an information-based system, where the information itself has no physical meaning. Security prevention carried out by funds is very good by implementing Two Factor Authentication (TFA), OTP and Visual identity Authentication (VIA). Even though this has been implemented, there are still many incidents where the security layer has been penetrated by irresponsible parties.



Picture 2.  
User Complaints Related to Security Issues

Source : Appstore (2023).

Based on the picture above, the complaint that occurred was the loss of user balance without any confirmation from the DANA application. Cases of loss of user balances often occur even though the company has anticipated by applying various levels of security layers, but these layers can still be penetrated. This is a factor why people are still reluctant to use DANA to make digital transactions.

Based on research conducted by Sigar (2016), the perception of expediency and the perception of ease of use have a significant effect on the intention to use e-money. Dewi and Warmika (2016) stated that the perception of ease of use and the perception of benefits have a positive and significant effect on the intention to use Mobile Commerce. Research conducted by Logahan et al. (2019) states that the perception of expediency and the perception of ease of use have a positive and significant effect on the intention to use e-money. Research conducted by Legi and Saerang (2020) states that ease of use has a positive and significant effect on the intention to use e-money, but the variable of perceived expediency does not have a significant effect on the intention to use e-money. Research conducted by Patel and Patel (2016) states that ease of use, and security have a positive and significant effect on the intention of customer actors to use internet banking services. Umaningsih and Wardani (2020) stated that the perception of convenience and security has a positive and significant effect on the intention to use e-money. However, research conducted by Afghani and Yulianti (2016) states that security variables do not have a significant effect on the intention of customer actors to use E-Banking services. From the results of the research described above, it can be concluded that the use of e-money services has various perceptions among students, so based on the background above, the author is interested in conducting research entitled *The Effect of Perceived Benefits, Ease of Use and Security on the Intention to Use the Dana Application*.

## **RESEARCH METHODS**

This type of research is quantitative descriptive research. According to Sugiyono (2012), quantitative research is defined as a research method based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, quantitative or statistical data analysis, with the aim of testing hypotheses that have been set. According to Abdul Hamid (2011), the scope requires an emphasis on location, time or sector restrictions and the variables discussed. This is very necessary so that the researcher does not go out of the area under study, and will be very useful for

beginners. The research was conducted on communities in Bandar Lampung city using DANA.

Data analysis techniques use Data Validity Test, Reality Test and Multiple Linear Analysis with the following formula:

$$Y = a + e + b_1x_1 + b_2x_2 + b_3x_3$$

Information:

Y : Intent to Use

X1 : Perception of benefits

X2 : Ease of Use

X3 : Security

a : Constant (value of Y if X1, X2, X3..... Xn=0)

b : Regression Coefficient (Value of increase or decrease)

e : Error

## RESULTS OF RESEARCH AND DISCUSSION

The results of calculating multiple linear regression coefficients using the help of the SPSS version 26 for Windows program based on research data are as follows.

**Table 1.**  
**Multiple Linear Analysis Results**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Itself.
	B	Std. Error	Beta		
1 (Constant)	1.176	.570		2.063	0.041
Perception of Benefits	.182	.049	.288	3.709	.000
Ease of Use	.183	.063	.310	2.927	.004
Security	.364	.094	.352	3.850	.000

The results of the regression coefficient obtained from the table above can be written in the form of an equation that describes the relationship of the data used is as follows:

$$Y = 1.176 + 0.182x_1 + 0.183x_2 + 0.364x_3 + e$$

Explanation:

1. Coefficient of constant (Y)

The positive Constant Coefficient means that when the Dana

Application in attracting consumers does not consider the perceived benefits, ease of use, and security, the intention to use will still increase.

2. Benefit Perception Coefficient (X1)

The coefficient of perceived benefits is positive, meaning that every increase in the perception of benefits that consumers have, will be accompanied by an increase in the intention to use as well. While any decrease in the perception of benefits owned by consumers decreases, it will be accompanied by a decrease in the intention to use.

3. Coefficient of Ease of Use (X2)

The coefficient of ease of use is positive, meaning that every increase in ease of use that consumers have, will be accompanied by an increase in intent to use as well. While any decrease in ease of use owned by consumers decreases, it will be accompanied by a decrease in intent to use.

4. Security Coefficient (X3)

A positive security coefficient means that every increase in security that consumers have increases, will be accompanied by an increase in intent to use as well. While every decrease in security owned by consumers decreases, it will be accompanied by a decrease in intent to use.

Based on the results of the calculation of multiple linear regression coefficients above, it is known that the variable that has the highest influence is the security variable (X3).

**Table 2.**  
**Test Results of the T Test Hypothesis**

Variable	Unstandardized Coefficients (B)	Standardized Coefficients B	t	Itself.	Ket.
			2.063	0.041	
Perceived Benefits (X1)	.182	.288	3.709	.000	Accepted Hypothesis
Ease of Use (X2)	.183	.310	2.927	.004	Accepted Hypothesis
Security (X3)	.364	.352	3.850	.000	Accepted Hypothesis

Source : Data processed, 2023



Based on Table 2 can be explained as follows:

1. First Hypothesis Testing (H1)

The first hypothesis states that Perceived Benefits (X1) have a positive and significant effect on Intention to Use (Y). Based on the results of the study of Variable X1 or Perception of Benefits, having a significant number of  $\alpha < 0.05$ , which is 0.00, the hypothesis is accepted, with the conclusion of the independent variable, namely Perception of Benefits (X1) has a positive and significant effect on the dependent variable Intention to Use (Y).

2. Testing the Second Hypothesis (H2)

The second hypothesis states that Ease of Use (X2) has a positive and significant effect on Intent to Use (Y). Based on the results of the study of Variable X2 or Ease of Use, having a significant number of  $\alpha < 0.05$ , which is 0.004, the hypothesis is accepted, with the conclusion that the independent variable Ease of Use (X2) has a positive and significant effect on the dependent variable Intention to Use (Y).

3. Third Hypothesis Testing (H3)

The second hypothesis states that Security (X3) has a positive and significant effect on Intent to Use (Y). Based on the results of the study of Variable X3 or Security, having a significant number  $\alpha < 0.05$ , which is 0.000, the hypothesis is accepted, with the conclusion that the independent variable Security (X3) has a positive and significant effect on the dependent variable Intention to Use (Y).

**Table 3.**  
**Coefficient of Determination Test Results**  
 Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.092 <sup>a</sup>	.814	.809	1.052

a. Predictors : (Constant), Security, Perception of Benefits, Ease of Use

**Source : Data processed. 2023**

From the test results above, an adjusted R Square of 0.814 or 81.4% was obtained. This shows that only 81.4% of the variation of the dependent variable, namely Intention to Use, can be explained by the independent variable, namely That means Perception of Benefits (X1), Ease of Use (X2), Security (X3) affect together on Intention to Use (Y) by 81.4% while the rest (100% -81.4% = 18.6%) is explained by other factors that are not studied.

## Discussion

### **The influence of perceived benefits on the intention to use**

Based on this study, Hypothesis 1 states that benefit perception affects the intention to use the Dana Application, it can be accepted that the benefit perception variable has a calculated t value of 3.709 and has a significant number  $\alpha < 0.05$  which is 0.000 which means that the Benefit Perception has a positive effect on the Intention to Use the Dana Application. This is supported by the questionnaire answers filled out by respondents on the variable of benefit perception, the dominant indicator is in the statement "I use the Dana Application because it speeds up transactions". this shows that users use the Dana Application because it can speed up transactions. From these results, it is concluded that there is a positive and significant influence of benefit perception variables on the intention to use the DanaApplication.

Positive influence means that the better the perception of benefits conveyed by users about the Dana Application, the more confident people who intend to use the Dana Application are. This proves that benefit perception is a variable needed because it is related to the benefits felt by consumers such as being able to speed up transactions, facilitate transactions, get profits when transacting and be efficient. So the first hypothesis that states that the perception of benefits affects the intention to use is proven to be true. This research is also in accordance with research conducted by Sigar (2016), Dewi and Warmika (2016), Logahan et al., (2019), stating that the perception of benefits has a positive and significant effect on the intention to use.

This research resulted in the conclusion that the perception of benefits has a positive and significant influence on the intention to use the Dana Application. These results support the first hypothesis, namely, the perception of benefits has a positive and significant effect on the intention to use the Dana Application.

### **The effect of ease of use on intent to use**

Based on this study, Hypothesis 2 states that ease of use affects the intention to use the Dana Application, it is accepted that the Ease of Use variable has a calculated t value of 2,927 and has a significant number of  $\alpha < 0.05$  which is 0.004 which means that Ease of Use has a positive effect on the Intention to Use the Dana Application. This is supported by the questionnaire answers filled out by respondents on the ease of use variable, the dominant indicator is in the statement "I think the Dana Application is easy to use". this shows that users use the Dana App because it is easy to use. From these results, it is concluded that there is a positive and significant influence of ease of use variables on the intention to use the Dana Application.

Positive influence means that the better the ease of use that users convey about the Dana Application, the more willing people will also intend to use the Dana Application. Ease of use is a measure where someone believes that using a technology can be clearly used and does not require much effort but must be easy to use and easy to operate (Ernawati and Noersanti, 2020). This proves that ease of use is an important variable because when using the Dana Application users feel that the Dana Application is easy to learn, easy to do what they want to do, does not require much effort, can be skilled when using it and easy to. This research is also in accordance with research conducted by Patel and Patel (2019), Sigar (2016), Dewi and Warmika (2016), Logahan et al., (2019), Legi and Saerang (2020), Umaningsih and Wardani (2020), stating that the ease of use variable has a positive and significant effect on the intention to use.

The conclusion of this study is that ease of use has an influence on the intention to use the Dana Application. So the results of the second hypothesis were obtained, namely ease of use has a positive and significant effect on the intention to use the Dana Application.

#### **The effect of security on intent to use**

Based on this study, Hypothesis 3 states that security affects the intention to use the Dana Application, it can be accepted that the security variable has a calculated t value of 3,850 and has a significant number  $\alpha < 0.05$  which is 0.000 which means that Security has a positive effect on the Intention to Use. This is supported by the questionnaire answers filled out by respondents on the Security variable, the dominant indicator is in the statement "I believe the Dana Application guarantees the Security of my money when transacting". This shows that users use the Dana App because the Dana App guarantees the Security of users' money when transacting. From these results, it is concluded that there is a positive and significant influence of security variables on the intention to use the Dana Application.

Positive influence means that the better the security conveyed by users about the Dana Application, the more willing people are to intend to use the Dana Application. This proves that the security variable is a factor because the Dana Application makes consumers not worry about providing personal information, believes that information is protected and guarantees the Security of money when transacting so as to attract consumers to make intentions to use. This is also supported by the security of the Dana Application itself which has implemented a layered security system such as two-factor authentication, OTP and visual identify authentication. This research is in accordance with research conducted by Patel and Patel (2019), Afghani and Yulianti (2016), Umaningsih

and Wardani (2020), stating that security variables have a positive and significant effect on the intention to use.

The conclusion of this study is that security has an influence on the intention to use the Dana Application. So the results of the third hypothesis were obtained, namely security has a positive and significant effect on the intention to use the Dana Application.

## CONCLUSION

Based on the results of research and hypothesis testing that has been researched, it can be concluded that:

1. The perception of the benefits of the Dana Application has a positive and significant effect on the Intention to Use, this is because the Dana Application can speed up transactions, facilitate transactions, get profits and be efficient when making transactions so as to attract consumers to intend to use it.
2. The ease of use of the Dana Application has a positive and significant effect on the Intention to Use, this is because the Dana Application is easy to learn, easy to do what you want, does not require much effort, skilled in using the Dana Application and easy to use so as to attract consumers to intend to use it.
3. The security of the Dana Application has a positive and significant effect on the Intention to Use, this is because the Dana Application makes consumers not worry about providing personal information, trusting that information is protected and guarantees the Security of money when transacting so as to attract consumers to intend to use it.

## REFERENCES

- Afghani M., F., & Yulianti. E., (2016). Pengaruh Kepercayaan, Keamanan, Persepsi Risiko, Serta Kesadaran Nasabah Terhadap Adopsi E-Banking Di Bank BRI Surabaya. *Journal Of Business And Banking* Vol. 6 No. 1, Hal. 113- 128.
- Chazar, C. (2015). Standar Manajemen Keamanan Sistem Informasi Berbasis ISO/IEC 27001:2005. *Jurnal Informasi*, 7, 48-57.
- Dewi. N., M., A., P., & Warmika. I., G., K., (2016). Peran Persepsi Kemudahan Penggunaan, Persepsi Manfaat Dan Persepsi Resiko Terhadap Niat Menggunakan Mobile Commerce Di Kota Denpasar. *E-Jurnal Manajemen Unud*, Vol.5, No. 4, Hal. 2606-2636.

- Ernawati Nopy & Noersanti Lina. (2020). Pengaruh Persepsi Manfaat, Kemudahan Penggunaan dan Kepercayaan terhadap Minat Penggunaan pada Aplikasi OVO. *Jurnal Manajemen STEI* Vol. 3, No. 6.
- Kotler & Keller. (2009). *Manajemen Pemasaran*. Jakarta : Erlangga.
- Legi. D., & Saerang. R., T., (2020). The Analysis Of Technology Acceptance Model (Tam) On Intention To Use Of E-money In Manado (Study On: Gopay, Ovo, Dana). *Jurnal EMBA*, Vol.8, No.4, Hal. 624-632.
- Logahan J., M., et al. (2019). Factors Affecting Intention To Use “Sakuku” E-money Of Generation Y In Indonesia. *Journal of Theoretical and Applied Information Technology*. Vol.97, No. 20, Hal. 2368-2375.
- Patel, K., J., & Patel, H., J. (2016). Adoption Of Internet Banking Services In Gujarat: An Extension Of TAM With Perceived Security And Social Influence. *International Journal Of Bank Marketing*.
- Sigar, J., F., (2016). The Influence Of Perceived Usefulness, Perceived Ease Of Use And Perceived Enjoyment To Intention To Use Electronic Money In Manado. *Jurnal EMBA*, Vol 4, No.2, Hal. 498-507.
- Sugiyono. (2012). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, Dan R&D*. Bandung: Alfabeta.
- Umaningsih. W., P., & Wardani. D., K., (2020). Pengaruh Persepsi Kemudahan, Fitur Layanan, Dan Keamanan Terhadap Niat Menggunakan E-money. *Jurnal Akuntansi Dan Ekonomi*, Vol. 5, No.3, Hal. 113-119.