

## Factors Affecting Millenials' Acceptance of E-Money Application in Jakarta

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**Abstract:** The use of e-money applications such as OVO, Gopay, Dana, LinkAja and other e-money applications have significantly increased the volume of non-cash transactions in Indonesia, but, Indonesia's non-cash transaction is still below its region's countries. On the other hand, Millennial generations (Millenials) is reported as the largest users of e-money applications as well as the largest potential market in Indonesia, however, limited researches have been conducted to study the acceptance of e-money applications by Millennials. This research is intended to determine factors that have significantly influenced Millenial's acceptance of e-money applications based on the theory of Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB), which covers variables include Perceived Usefulness, Perceived Ease Of Use, Trust, Subjective Norms, Attitude Toward Use and Behavior Intention. This research examined 100 Millenials in Jakarta, which selected with purposive sampling technique, and tested using PLS SEM statistical analysis method. The results show that Perceived Usefulness has the strongest positive effect on Attitude Toward Use, followed by Trust. While Attitude Toward Use and Subjective Norms have positive effect on Behavior Intention. Whereas, Perceived Ease of Use and Subjective Norms have no significant effect on Attitude Toward Use. It is concluded that Perceived Usefulness and Trust are the two main factors which influenced Millenial's acceptance of e-money applications in Jakarta.

**Keywords:** E-Money Acceptance, Perceived Usefulness, Trust, Millennial Behavior

### 1. Introduction

The volume of e-money transactions in Indonesia have increased every year since 2015, as reported by Bank Indonesia. Whereas significant increase was noted in 2018, where the volume of transactions rise from Rp.12,3 T to Rp. 47 T, and again rise in 2019 to Rp 145 T. Snapcart Indonesia (2019), reported that transactions using e-money applications are significantly higher, where OVO is the most popular (58%), followed by Gopay (23%),

Dana (6%) and LinkAja (1%), compared to e-money in the form of cards issued by banks (Flazz (BCA), Brizzi (BRI) dan Mandiri e-money) which amount to 11%. Despite this increase, Indonesia's non-cash transactions is still below its region's countries, where Indonesia's non-cash transactions is reported at 4%, while Vietnam at 11% and Singapore at 57% as reported by Grab (2019).

In order to raise awareness and to increase the use of non-cash among the public, business people and government institutions, Bank Indonesia, since 2014, launched the National Non-Cash Program (GNNT). Bank Indonesia is targeting this program to reach at least 25% of Indonesia's population by 2024. To regulate the use of e-money in Indonesia, Bank Indonesia released PBI: 11/12 / PBI / 2009 which was later updated in PBI: 18/17 / PBI / 2016), which stated that e-money is issued based on the value of money deposited by the user to the issuer, which is then stored in media in the form of card (chip based) or server (server based). As of April 2020, Bank Indonesia has provided license for 49 companies as e-money issuers for both chip based and server-based e-money.

DailySocial.id (2017) and Ipsos (2020) reported that e-money applications was mainly used by Millenials with the percentage reached 84.81% and 81% respectively, compared to the older generations. Millenials is a generation which born in the year of 1980 - 2000 (Ministry of Women's Empowerment and Child Protection of the Republic of Indonesia, 2018). According to Ordun (2015), Millennials is the main market driver in Indonesia, which amount to 33.75% (88 million people) of the total population of Indonesia (Ministry of Women's Empowerment and Child Protection of the Republic of Indonesia, 2018). This means that increasing usage of e-money applications by Millennials can significantly contribute an increase to Indonesia's non-cash transactions and thus in line with the GNNT program of the government, however, limited studies have been conducted to research this acceptance of e-money applications by Millenials. With this in mind, this research is intended to

determine factors that have significantly influenced Millennial's acceptance of e-money applications based on the theory of Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB).

Technology Acceptance Model (TAM) is a theory that is largely used to predict individual acceptance of information technology because of its simplicity. This theory was first introduced by Davis and developed based on Theory of Reasoned Action (TRA) which devoted to user acceptance of information technology (Kim et al, 2009). TAM has two main factors, namely Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) which affect a person's attitude in using technology (Attitude Toward Use (ATU)), which in turn will affect one's intention (Behavior Intention (BI)) to use the technology. One of the shortcomings of TAM is the absence of social factors that are considered to be able to influence a person in using technology (Mathieson, 1991). In addition, existing literatures also suggests that the individual's intention to use a system or technology may result not only from the direct interaction with (and the evaluation of) the system or technology, but can also be influenced by individual psychological attributes, as well as by the social environment in which the individual takes part. (Tian et al , 2020).

Theory of Planned Behavior (TPB) is a theory developed by Icek Ajzen that connects a person's beliefs with behavior (Ajzen, 2005). These beliefs include behavioral beliefs, which is beliefs that form a person's attitudes towards a behavior and normative belief, which is a person's belief to the norms in their environment (subjective norms) that influence their decisions making.

According to Ministry of Women's Empowerment and Child Protection of the Republic of Indonesia (2018), Millennial generation (Millennials) is a generation which born during the year 1980 to 2000. This generation is the first generation which exposed to computer technology and internet since early age. Several characteristics have been noted for Millennials as explained by Gray, et al (2019) and Ministry of Women's Empowerment and Child Protection of the Republic of Indonesia (2018), which includes; technologically savvy, fast learner, wants to do anything fast, having their own strong opinion, and wants to be actively involved. Further, they are also noted as more creative and informative compared to the previous generation, have an open mindset, and also critical thinking. Whereas from marketing point of view,Ordun (2015) stated that Millennials is the main market driver in Indonesia. They are currently within the productive age which make them an important target for every industry in order to maintain its competitive advantage.

As defined in the original TAM theory by Davis (1989), *Perceived usefulness* is "the degree to which a person believes that using a particular system would enhance his or her performance". Similar to Davis, Kamal (2020) defined perceived usefulness as the extent to which a person feels confident that using the technology will help them in improving their performance. This improvements can be both in the form of physical and non-physical benefits, such as the speed (faster) and better quality of the results compared to the absence of such technology. While Bailey et al. (2017) stated that in term of a mobile payment system, perceived usefulness refers to the extent to which consumers believe that they derive benefits (for example, general convenience, simplification, etc.) by using that payment system, as against other form of payments. Davis (1989) stated that perceived usefulness influenced the users' attitude toward using the technology. The same also reported by Filona & Misdiyono (2019), which stated that perceived usefulness has significant impact on consumer's attitude toward adoption of e-money. Consumers favorable attitudes on the use of e-money is created when they feel the usefulness of e-money in making a payment process faster and more practical than cash. Chawla & Joshi (2019), found that perceived usefulness is the main factor that most significantly determines user attitudes towards the use of e-wallets (e-money) in India. Chauhan (2015) pointed out that if people are made aware of the usefulness of m-money (e-money) it will provide a push to use it. Based on the above descriptions, this research hypothesized the following:

Based on the above descriptions, this study hypothesized the following:

**H1: Perceived usefulness has positive effect on attitude toward use in using e-money applications**

Davis (1989) explains that perceived ease of use is the extent to which a person believes that it will be easy to use a particular system. According to Mun et al (2017) "perceived ease of use can be interpreted as the extent to which someone believes that they will be free from mental and physical efforts in using a technology" Venkatesh and Davis (2000) stated 4 dimensions in perceived ease of use: (1) interactions with the system are clear and easy to understand, (2) does not require a lot of mental effort to interact with the system, (3) an easy to use system, (4) easy to get system to do what she/he wants to do. Original TAM theory suggests that perceived ease of use is one of the factors that significantly affect consumer's attitude toward using a technology (Davis, 1989). Whereas, in the context of fintech services, Chuang et al. (2016) stated that perceived ease of use of a fintech services will affect consumers' attitude towards using the service, which include indicator such as friendliness of operation processes and ease of downloading the application. This results also supported by Safeena et al. (2011) which stated that, the easier a user perceived to interact with a system, the more likely they will use the system.

Based on the above descriptions, this study hypothesized the following:

**H2: Perceived ease of use has positive effect on attitude toward use in using e-money applications**

Although the original TAM theory does not include trust as one of its factors, however, many studies have included trust in TAM as external variable (Chauhan, 2015). Despite various advantages in the system, lack of trust can act as a potential obstacle to the extensive use of that system. According to Mayer et al. (1995), trust reflects the willingness of a person to be in vulnerability based on positive expectations towards another party's future behavior. While McKnight & Norman (2001), explained that, when it comes to behavior, trust means that a person voluntarily depends on another person with a feeling of relative security, even though negative consequences are possible. Whereas Robbins (2016) said "trust is conceptualized as a belief about another person's trustworthiness concerning a particular matter at hand that emerges under conditions of unknown outcomes." Relationship between trust and attitude is described by Lin (2011) that, in the context of mobile transactions system (such as e-money applications), users develop trust based on the ability of the stakeholders (the provider of the system) to provide competent service ensuring integrity of user data and transactions, which in turn, influences their attitude. This relationship between trust and attitude is similar to what's stated by Van der Heijden et. al. (2003) "consumer confidence in a new technology will directly affect consumer attitudes towards the technology." Further studies by Chauhan (2015) and Chawla & Joshi (2019) also noted that trust has significant effect on attitude toward use of a technology.

Based on the above descriptions, this study hypothesized the following:

**H3: Trust has positive effect on attitude toward use in using e-money applications.**

Subjective norm, as explained in the theory of planned behaviour (TPB), is a person's perceived social pressure to perform or not to perform a certain behaviour (Ajzen, 1991). In the context of technology, Venkatesh et al. (2003) defined subjective norm as the degree to which an individual perceives that important others believe he/she should use the technology. Yu (2012) identified subjective norm as the most powerful factor in affecting people intention (behavior intention) to use mobile banking. It was found that respondents were significantly influenced by peer groups and interpersonal world-of-mouth. This consistent with Ajzen (1991) which stated that subjective norm is one of the independent determinants of intention (behavior intention).

Further, the significance of subjective norm on users' attitude towards a technological innovation has been established in previous studies (Yu, 2012; Schierz et al., 2010). According to Nguyen et al (2019) the positive results from friends and close relatives regarding the use of technology make consumers more motivated to try the technology themselves.

Based on the above descriptions, this study hypothesized the following:

**H4: Subjective norms have positive effect on behavior intention in using e-money applications**

**H5: Subjective norms have positive effect on attitude toward use in using e-money application.**

Attitude towards a behavior is defined in TPB, as the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question (Ajzen, 1991). Where as in the context of technology, TAM defines attitude toward use as the user's evaluation of the desirability of his or her using the system (Mathieson, 1991). Both TAM and TPB have the same definitions for attitude and intentions. *Behavior intention* is defined by Ajzen (2005), as an individual's perception of whether or not to carry out a behavior in the future as influenced by beliefs and attitudes. Ajzen & Fishbein (1991) also defines *behavior intention* as a measure or intensity level of individual's intention to perform a certain behavior. Thus it can be concluded that to know the possibility of an individual's behavior can be seen from the behavior intention of the individual (Go, 2018)

According to Ajzen (1991), attitudes towards a behavior have a significant contributions on the prediction of intentions. Maduku (2014) stated that a person's positive attitude towards a technology will form a strong intention to use that technology. Whereas Nguyen et al. (2019), in the context of Mobile Commerce in Vietnam, stated that the user's attitude toward the use of technology has the strongest effect on their intention to adopt the technology. Previous researches have also found positive effects of attitude toward use on behavior intention (Filona & Misdiyono, 2019; Chawla & Joshi, 2019; Chauhan, 2015; Chu & Chen, 2016).

Based on the above descriptions, this study hypothesized the following:

**H6: Attitude toward use has positive effect on behavior intention in using e-money applications**

Based on the above descriptions, the study model for this research is presented as follow:

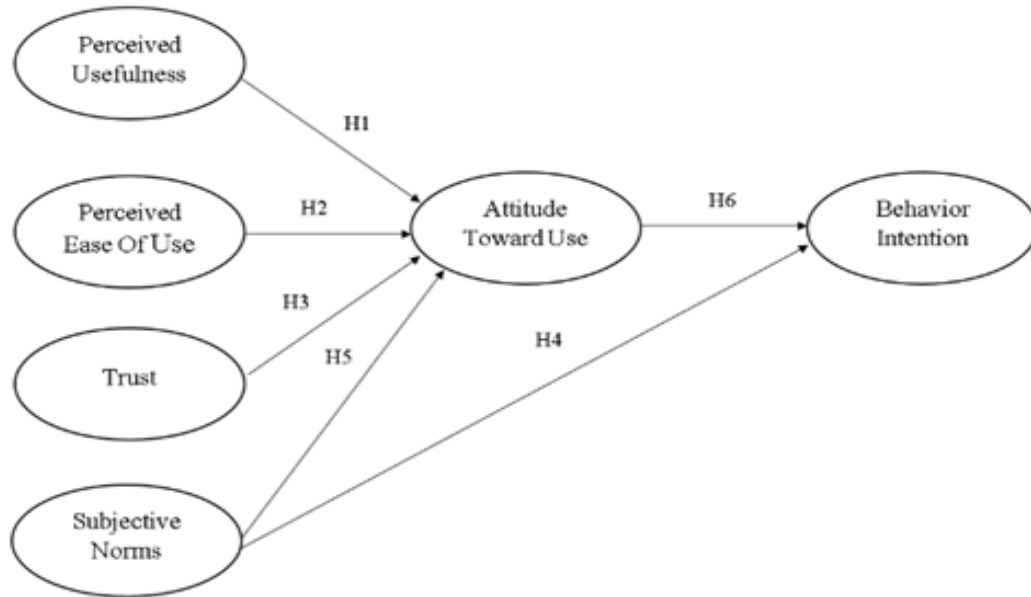


Figure 1. Developing Hypothesis Study Model

2. Methods

The population in this research is focused on millennial generation in Jakarta which born in the year 1980 to 2000. Since the population is unknown, the ten time rules is used to measure the minimum sample of this research as stated by hair et al, (2014) “the minimum sample in PLS SEM analysis should be equal 10 times of the largest number of structural paths directed at a particular construct in the structural model.” Based on this theory, the minimum sample for this research is 60. According to Hair et al (2014) PLS SEM can achieves high levels of statistical power with small sample sizes but, larger sample sizes increase the precision. In addition, Reinhartz (2009) stated that, in PLS, 100 samples can be sufficient to achieve acceptable levels of statistical power. Thus 100 samples was collected for this research.

The data from respondents is gathered by using questionnaire with 6 points Likert scale which starts from (1) strongly disagree to (6) strongly agree. The 6-point Likert scale is used to avoid neutral answers from respondents. The measurement items are based on literature reviews and previous studies that are used to measure Millenials' acceptance in using e-money applications which presented in table 1. The questionnaire in Indonesian was distributed through online form to Millenials in Jakarta who have regularly used e-money applications for transactions, which selected using purposive sampling technique

Table 1. Study Variable Indicator

Construct	Kode	Item	Source
Perceived Usefulness	PU1	The e-money application makes my transaction activities easier	Ferdyana Lie (2019) Maduku (2014)
	PU2	By using the e-money application I can complete more payment transactions in less time.	
	PU3	Using the e-money application allows me to have a more productive time.	
	PU4	Using e-money applications can help improve my performance	
	PU5	Using the e-money application makes my transactions faster and accurate	
	PU6	Using the e-money application increases my effectiveness in making transactions	
	PU7	By using the e-money application, I can complete my transactions more effectively. (for example: payments, transfers, online food, online motorcycle taxis, etc.)	
Perceived Ease of Use	PEOU1	The way to use the e-money application is clear and easy to understand	Chauhan (2015)
	PEOU2	I don't need to learn much to understand the use of	

Construct	Kode	Item	Source
Trust		the e-money application	Maduku (2014)
	PEOU3	The e-money application can be used without much effort	
	PEOU4	Using the e-money application does not need to seek additional tools (for example: storage, cards, and others)	
	PEOU5	The e-money application is easy to use	
	PEOU6	Using the e-money application does not require special skills	
	PEOU7	The interaction method on the e-money application makes it easy for me to make the transactions I want	
	TR1	The e-money application can be trusted in protecting my money	
	TR2	I believe the e-money application is safe to use	
	TR3	The e-money application was reliable when I needed it	
	TR4	I'm sure I can use my money in the e-money app whenever I want.	
Attitude Toward Use	AT1	Using e-money is a good idea for me	Chauhan (2015) Maduku (2014)
	AT2	Using e-money is a good decision for me	
	AT3	I like to use the e-money application for transactions	
	AT4	I think the e-money application is interesting to use	
Subjective Norms	SN1	People around me use the e-money application when making transactions	Chu & Chen (2016) Yu (2012)
	SN2	People closest to me recommended me to use the e-money application	
	SN3	I follow people around me to use the e-money application for transactions	
	SN4	I followed the recommendations of my closest people to use the e-money application	
Behavior Intention	BI1	I will use the e-money application to transact when needed	Chauhan (2015) Maduku (2014)
	BI3	I plan to use the e-money application as often as possible	
	BI3	I wish to use the e-money application when needed	
	BI4	I am motivated to use the e-money application as often as possible	

The validity test indicates the extent to which observations are accurately record the behavior that the researcher is intended (Bougie & Sekaran, 2016). There are two types of validity tests on SmartPLS, namely the convergent validity test and the discriminant validity test. Convergent validity can be assessed by two parameters, namely factor loading and Average variance extracted (AVE). The factor loading value must be a value above 0.6 and ideally 0.7 and the AVE value must be greater than 0.5 to be declared valid (Hair et al, 2014). Meanwhile discriminant validity can be assessed using cross loading. Specifically, the square root of the AVE of each construct should be higher than its highest correlation with any other construct (hair et al, 2014).

Reliability test indicates consistency when repetition of the same event exist (Bougie & Sekaran, 2016). Reliability test can be determined by Composite Reliability. The value of composite reliability must be greater than 0.7 in order to be declared reliable (Hair et al, 2014). PLS analysis is an analysis that can be used to find a relationship between two or more variables, consisting of exogenous and endogenous variables.

The T-test is carried out to test the coefficients on exogenous variables against endogenous variables directly (Ghozali, 2013). The results of the earlier t-test will be compared with the t table using a significant level of 5%, in which the hypothesis is accepted if the t-stat >1,96 and rejected if the t-stat < 1,96. Beside t-value, the hypothesis result can also be reported using p-value in which the hypothesis is accepted if the value of p value is <0.05 and rejected if the p-value >0.05.

### 3. Result And Discussion

Data collection was carried out which focused on the millennial generation who have regularly used e-money applications transactions, which born in the year 1980 - 2000. The results are separated into multiple categories as presented in table 2.

**Table 2.** Characteristics of Respondents

Description	Groups	QTY	%
Gender	Male	58	58%
	Female	42	42%
Age	20-25	77	77%
	26-30	9	9%
	31-35	8	8%
	36-40	6	6%
Job	Student	44	44%
	Employee	43	43%
	Business	8	8%
E-Money Application Used	Other	5	5%
	1 Apps	23	23%
	2 Apps	41	41%
	3 Apps	25	25%
	4 Apps	10	10%
Frequency of E-Money Used per month	5 Apps	1	1%
	1-2 Times	19	19%
	3-5 Times	28	28%
	6-10 Times	21	21%
	>10 Times	32	32%

The convergent validity test results can be confirmed by using Factor Loading and average Variance Extracted (AVE). Items and variables will be valid if they have a factor loading value above 0.6 and AVE is greater than 0.5. (Table 3). the discriminant validity test is also confirmed as the square root of the AVE of each construct is higher than its highest correlation with any other construct. (Table 4).

Composite Reliability of all variables is above 0.7 which indicates that all of the above variables are declared reliable. (Table 5).

Testing the direct influence hypothesis is used to test whether there is an effect of exogenous variables directly on endogenous variables. The test criteria state that if the path coefficient is positive and the value of T-statistics  $\geq$  T-table (1,96) then it is stated that there is a positive and significant influence of exogenous variables on endogenous variables. The results of hypothesis testing is provided in Table 6.

**Tabel 3.** Convergent Validity

Variabel	Item	F. Loading	AVE
PU	PU1	0.852	0.624
	PU2	0.828	
	PU3	0.790	
	PU4	0.637	
	PU5	0.901	
	PU6	0.898	
	PU7	0.877	
PEOU	PEOU1	0.839	0.526
	PEOU2	0.789	
	PEOU3	0.810	
	PEOU4	0.605	
	PEOU5	0.905	
	PEOU6	0.606	
	PEOU7	0.809	
TR	TR1	0.889	0.655
	TR2	0.721	
	TR3	0.788	
	TR4	0.828	
AT	AT1	0.922	0.806

Variabel	Item	F. Loading	AVE
SN	AT2	0.908	0.833
	AT3	0.876	
	AT4	0.884	
	SN1	0.911	
	SN2	0.894	
	SN3	0.906	
	SN4	0.938	
BI	BI1	0.698	0.655
	BI2	0.871	
	BI3	0.819	
	BI4	0.839	

**Table 4.** Discriminant Validity

	AT	BI	PEOU	PU	SN	BI
AT	0.898					
BI	0.788	0.810				
PEOU	0.658	0.631	0.725			
PU	0.764	0.681	0.704	0.790		
SN	0.458	0.660	0.420	0.492	0.912	
TR	0.747	0.730	0.620	0.606	0.492	0.809

**Tabel 5.** Reliability Test

Variabel	Composite Reliability
PU	0.927
PEOU	0.888
TR	0.883
AT	0.943
SN	0.952
BI	0.883

**Tabel 6.** Hypothesis Test Result

Hypothesis	Variable	T- Stat	P-Value	Result
H1	PU→AT	5.396	0.000	Accepted
H2	PEOU→AT	0.699	0.485	Rejected
H3	TR→AT	5.209	0.000	Accepted
H4	SN→BI	4.581	0.000	Accepted
H5	SN→AT	0.172	0.863	Rejected
H6	AT→BI	8.373	0.000	Accepted

The first hypothesis about the effect of perceived usefulness on attitudes towards use e-money applications is accepted, meaning that the respondents perception about the benefits they got from using e-money applications have positive effects on their acceptance. This results confirmed the original TAM theory and also in line with several previous studies (Filona & Misdiyono, 2019; Chawla & Joshi, 2019; Chauhan, 2015). It is stated that “if people are made aware of the benefits of using technology to make transactions quickly and effectively, this will encourage them to use it (Chauhan, 2015). Further, of all the benefits indicators used in this study, transaction speed and effectiveness of e-money applications are factors that most resonate with the characteristics of the Millennials who likes fast and effective technology.

The second hypothesis is rejected, which means that the respondent's perceptions about the ease of using e-money applications have no significant effects on their acceptance. This results is different from the original TAM theory which states that ease of use have positive effects on the user's acceptance of technology. The respondents answer to questionnaire showed that 77% of them installed two to five e-money applications and use them interchangeably for their transactions, which indicates that the respondents put little importance and have little preference on how (the ease) to use each applications compared to the benefits they got from using these applications. A follow up interview to several respondents confirmed this finding. This results in line with the characteristic of Millennials who's familiar with technology and known as technology savvy. For them, adapting with new technology is not difficult. This also in line with the results of previous studies by Chauhan (2015) and Chawla & Joshi (2019). It is stated that although intuitively ease of use is important, however only enhancing ease of use would not result into increased acceptance (Chauhan 2015).

The third hypothesis regarding trust is accepted which means that trust has positive effect on attitudes towards using the e-money application. This results in line with the previous study by Chauhan (2015) Chawla & Joshi (2019) which found that trust is significantly impacting attitude towards using mobile money and mobile wallet in India. Based on questionnaire data, it was found that 81% of the respondent make at least three transactions per month with the highest make more than 10 transactions per month, these shows that they have trusted the system. The respondents trust the system mostly because they can rely on the ability of system to complete their transactions and in a secured manner.

The forth hypothesis regarding the effect of subjective norms on behavior intention is accepted, which means that social pressure significantly affecting the respondent's behavior intention in using e-money applications. The respondent are most affected by usage of e-money application by other people close to them and their recommendations. This result in line with previous by Nguyen et al. (2019) which stated that positive results from friends and close relatives on the use of technology make consumers more willing to try the technology themselves”. Also this results is in line with the original TPB theory.

The fifth hypothesis regarding the effects of subjective norms on attitude toward use is rejected, which means that although subjective norms have positive effects on the respondent's intention to use e-money application, apparently subjective norms do not have significant effects on the respondent's attitude. Based on a follow up interview with several respondents it is noted that the existence of risk involved (losing money) in using e-money applications have created the need on the respondents to experience the system by themselves, before they make decision to use it. Thus in this case, subjective norms have only affects the respondents' intention (the willingness to try) not yet the attitude. This in line with the previous study by Maduku (2014) which stated that the risk of using a technology affects the relationship between subjective norm and attitude. In addition, this results also consistent with the characteristic of Millennials who have critical thinking and wants to have their own opinion (Gray et al, 2019; Ministry of Women's Empowerment and Child Protection of the Republic of Indonesia 2018).

The sixth hypothesis regarding effects of attitude toward use on behaviorintention is accepted, which means that the respondent's intention to use e-money applications is affected by their attitude toward using the system. Thus when users favored the use of the technology, it will affect their intention to use the technology. The respondent data indicated that the respondent's positive attitudes is coming from their interest to take advantage the benefits (fast, effective, easy, reliable, and secure) of using e-money applications for their transactions and thus affect their intentions to use. This result is in line with the original theory of TAM and TPB. Davis (1989) stated that behavior intention is the main dependent variable, where attitude toward use of technology is a key mediator of other variables' influence on behavior intention.

#### **4. Conclusion**

This study aims to determine factors that influence Millennials' acceptance of e-money application in Jakarta, based on the theory of Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB) which covers factors include perceived usefulness, perceived ease of use, trust, attitude toward use, subjective norms and behavior intention. It can be concluded that: 1) Perceived usefulness and trust have positive effects on attitude



toward use, 2) attitude toward use and subjective norm have positive influence on behavior intention, and 3) perceived ease of use and subjective norms do not have significant effect on attitude toward use.

The results of this study suggest that, on top of existing strategy of marketing and operating the system, there are specific characteristics of Millennials that can be targeted by service providers to increase effectiveness of such strategy that, if followed, can increase the acceptance of e-money application by Millennials. Millennials are more interested in the benefits they got from using e-money applications rather than how (the ease) to use the system. Further, Millennials also more interested to be involved (to have experience) when making decision, especially in the existence of risk involved with the behavior (using the system) and thus by only providing them with information about the system would not very much affects their attitude of using the system. Millennials also need the system to be secured and dependable.

With this results, the managerial implications that can be carried out by service providers (e-money application issuer) are include the following: 1) To be more innovative in developing new features (new services) by providing more capability and capacity of transactions within the system, for example by collaborating with various merchants online and offline, etc., 2) providing the users with more benefits such as transactions discounts, bonus balance, special membership, etc., 3) The performance and security of the system and the technology (infrastructure) used also needs to be maintained and increased to ensure good performance and safe use of the system. Monitoring of the security and performance of the system, and also the speed in resolving customer problems (i.e complains) needs to be considered in order to ensure that the best performance is provided to customers, 4) To ensure that more experiential marketing strategy is used to let potential customers (the Millennials) to try and experience themselves the use of e-money applications so they can have their own direct experience which will affects their understanding about the usefulness of using the system (e-money applications) and build trust that will strongly affects their attitude toward using the system.

Considering the limitations of this study, it is suggested that further research can be carried out to include more variables and to cover larger areas with larger sample size to be more comprehensive.

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