CHAPTER II

THEORETICAL FRAMEWORK

2.1. Prior Research

According to Sularso (2012) perceived ease of use for consumers give a direct impact on attitudes and intentions. Direct influence Ease of use towards attitude easy to use online purchases, easy purchasing procedures, clear procedures, the people involved must be positive about online. Because easier process of using technology for online purchases; the process is easy to understand, easy to use, the procedure is clear, then consumers will increasingly intend to make purchases in a way online, with the perception that buying through online will be free of difficulty or ease.

Perception of ease of use based on research conducted by Adi Triatma (2012) regarding "Trust and Influence Technology Acceptance of Consumer Interest in Purchases Online (www.kaskus.us case study) ", shows that perception ease of use has a positive influence on interest consumers to transact to web retailers.

The issue of behavioral intention to use electronic transaction is backed up with rapid change in all types of traditional transactions. Electronic money (e-money) exists as new technology for electronic transaction. However, it is still ineffective in Indonesia where majority of the consumer prefer to use manual transaction business in the Bank and using cash notes. This is potential for crime when they bring a lot of money to the Bank that may have an impact on the Indonesian economy. E-money is a stored value or

prepaid products that had recorded the funds or value and it can be done in online and offline transaction. Behavioral intention is a process in any type of actual behavior by giving the expression in making decision to the adoption of behavioral intention. This research attempted to explain consumers' intentions to participate in the e-money transaction through the model that integrates the TPB (Theory of Planned Behavior) and the TAM (Technology Acceptance Model). There were five major variables or focus of the concept and practice of e-money transaction that have been studied in this article (Khatimah & Halim, 2013).

According to Khatimah & Halim (2013), the conceptual framework of e-money transactions were reviewed to understand behavioral intention of consumers from perceived usefulness, perceived ease of use, perceived risks, security and encouraging a learning system transaction. The proposed framework and hypotheses were presented in this article. Quantitative method was utilized as sources of data collection. A total of one thousand and five hundred respondents were selected using purposive sampling method in Medan, Indonesia. Descriptive analysis and Multiple Regression analysis were conducted to analyze the data. The article ended with suggestion for future studies.

Behavior are actions or reactions of an object or organism. Behavior can be conscious or unconscious, frankly or not, voluntary or not. Human behavior can be either general or uncommon behavior, acceptable or unacceptable. Humans evaluate acceptance of behavior by using benchmarking standards called social norms and regulating behavior using social control.behavior by using benchmarking standards called social norms and regulating behavior using social control (Rahmah, 2017).

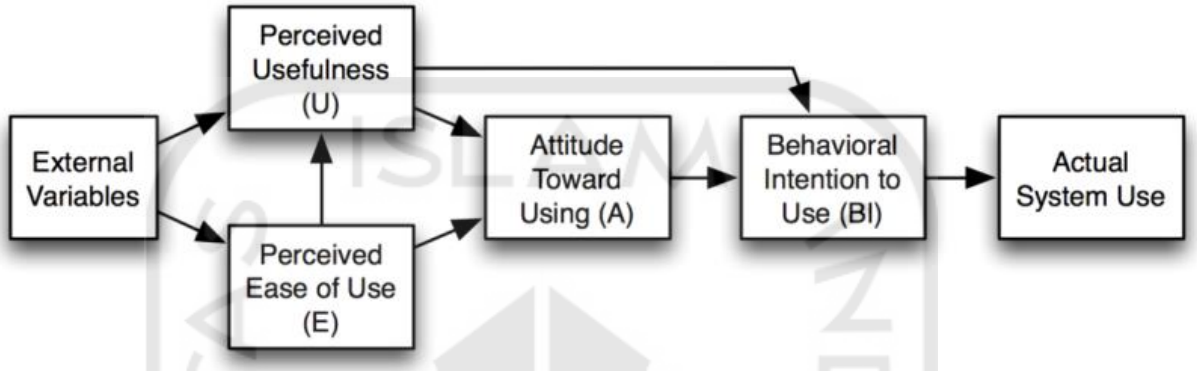
2.2. Theoritical Background

2.2. 1. Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) was introduced by Fred Davis in 1986 for his doctorate proposal and then TAM was developed and used by several researchers such as Venkatesh (2000) and then further expanded by Davis (2000). According to Bagozzi, Warshaw & Davis (1992), because new echnologies such as personal computers are complex and an element of uncertainty exists in the minds of decision makers with respect to the successful adoption of them, people form attitudes and intentions toward trying to learn to use the new technology prior to initiating efforts directed at using. Attitudes toward usage and intentions to use may be ill-formed or lacking in conviction or else may occur only after preliminary strivings to learn to use the technology evolve. Thus, actual usage may not be a direct or immediate consequence of such attitudes and intentions.

Two cognitive beliefs are postulated in TAM – perceived usefulness, and perceived ease of use. TAM also postulates that one's actual use of a particular IS/IT system is influenced directly or indirectly by some specific latent variables, such as the user's behavioral intentions, attitude ,perceived usefulness and perceived ease of the system. TAM also postulates that external factors affect behavioral intention and actual use through mediated effects on perceived usefulness and perceived ease of use. In addition, Consumer Acceptance of Technology model is derived from TAM, which was also proven as a comprehensive and more powerful tool in describing, and predicting consumer adoption of a particular IT/IS (Amin, Azhar, Amin, & Akter, 2015). From

the statement above, TAM is the most important and reliable foundation to analyse acceptance of e-money. TAM also explains factors of acceptance of e-money.



Source: Davis, Bagozzi & Warshaw (1989)

Figure 2.1 : TAM Path Analysis

The TAM model was actually adopted from the TRA model which is a theory of action that reasoned with one premise that a person's reaction and perception of something will determine the person's attitude and behavior. The reaction and perception of Information Technology (IT) users will influence their attitude toward acceptance of the technology. One of the factors that can influence it is the user's perception of the usefulness and ease of use of IT as a reasoned action in the context of technology users. Thus, someone's reason for seeing the benefits and ease of use of IT makes the person's actions / behaviors as a benchmark in the acceptance of a technology. In general, technology users will have a positive perception of the technology provided, negative perception occurs usually because after the user tries the technology or the user has bad experience with the use of the technology (Rahmah, 2017).

Perception is a process that is preceded by sensing, which is a stimulus that is received by an individual through a receptor device, the senses. The sense instrument is the link between the individual and the outside world. Perception is a stimulus sensed by an individual, organized and then interpreted so that the individual is aware of and understands what is being perceived (Uma, 2013).

According to Rahmah (2017), in general technology users will have a positive perception of the technology provided, negative perception occurs usually because after the user tries the technology or the user has bad experience with the use of the technology**.** Factors that cause experience are actually closely related to the second factor of TAM, the ease that is felt in using technology. According to Wijaya (2006), the perceived ease of using technology is influenced by several factors, namely:

The first factor focuses on the technology itself, for example the user experience on the use of similar technology. Good user experience of similar technologies will affect user perceptions of technology.

The second factor is the reputation of the technology obtained by the user. A good reputation heard by users will encourage users' confidence in the ease of use of the technology, and vice versa.

The third factor that influences user perceptions of the ease of using technology is the availability of reliable support mechanisms. In addition to the above factors, there are also other factors that cause Ease that are felt in the use of the system as follow:

1. Confirming users that it is not difficult to use the system.
2. Convincing users that with the system, the work done will be easier.

3. Convincing users that the system learning process is fast an good

In the organizational context, this usefulness is of course associated with improving the performance of individuals who are directly or indirectly. Slightly different from the individual's perception of the usefulness of IT, another variable put forward by Davis that influence the tendency of individuals to use IT is the perception of ease in using IT.

Ease means without difficulty or free from difficulties or no need to try hard. Thus, the perception of ease of use refers to the individual's belief that the IT system that will be used is not a hassle or does not require great effort when used.

Whatever feels good for the benefits of IT (Perceived usefulness) and the perception of ease of use of IT (Perceived ease of use) affects the attitude of individuals toward the use of IT, which in turn will determine whether or not people intend to use IT (Intention). Thus, intention to use IT will determine whether or not people will use IT (Behavior).

In TAM, Davis (1986) found that perceptions of IT benefits also influenced the perception of ease of use of IT but did not apply otherwise. Thus, as long as individuals feel that IT is useful in their tasks, then individuals will intend to use it regardless of whether IT is easy or not. To further reveal the interrelationships between perceptions of benefits and the perceived ease of using IT.

2.2.2. Electronic Money

According to Lodhi (2014), electronic money despite the advanced protection and constantly upgrade is an easy target to hack. If you register your account with

simple password it would be easier to be hacked. therefore you should use complicated pasword to increase your account security and save your fund. What some electronic money provider do is in a secure path, user do a transaction, the provider immediately verifies the transaction details from the owner via mobile network. If the user cannot provide suitable information, the provider simply reject further transaction. Furthermore, as stated above, user and provider of e-money should consider safety regulation of E-money. Thus, it will have impact on acceptance of E-money acceptance itself.

In other word electronic money is a money that you exchange from physical form to non physical form. Furthermore, you do transaction with electronic money over the internet network with software such as mobile banking application or hardware such as card that linked to electronic money account provider or bank account. Every year people that use electronic money are increasing. Everywhere and anytime you can use electronic money. Electronic money is suitable for international transaction because the user do not need to do the currency exchange. Electronic money is simple to use and faster than regular checks and user can do the transaction with low cost. As the increasing usage of electronic money the electronic money provider competing to make electronic money bocome transaction with lower cost and easier to acces. If user sends money by checks it need few days to complete the transfer but electronic money only needs few second to complete the transaction and with electronic money the transaction can be done 24 hours a day or even in public holiday (Paine, 2017).

Electronic money is saver in term of saving in physicaly because when you bring huge amount of money it can be lost or stolen. Personal identification number (PIN) is needed when you do the transaction for the payment to be completed. Electronic funds transfers can be more secure than cash or check transactions. All you have to do is take some simple precautions to make sure that your card or online account is not misused. Each and every transaction made with electronic money is recorded in the bank's and the user's online records. These records have all the essential information about the transaction: the name of the payer, the name of the receiver, the date, place and time it took place. This makes it more dependable, and users can access their record of transactions at any time of the day (Paine, 2017). Beside that, there are lots of advantage of electronic money that attract people to use electronic money.

Bank Indonesia (BI) said that non-cash payments consistently continued to increase until early 2019. Of BI records, the use of ATM debit cards, credit cards, and electronic money grew by 15.3 percent (year-on-year), higher than the growth of cash payments is only 7.4 percent yoy. "Among other things, electronic money grew 66.6 percent yoy," said Executive Director of BI Communication Department Onny Widjanarko in his statement on the official website of BI on Thursday, March 21, 2019. But in composition, Onny said that the use of debit ATM cards still dominated the retail payment system. The number reached 94.8 percent and grew 15.4 percent yoy in January 2019.

Since the third quarter of 2018, BI has noted that non-cash transactions, especially through electronic money continue to soar compared to the previous year. At

that time, BI noted that electronic money transactions grew by 300.4 percent. "It is driven by the strong preference of people to transact through financial technology and e-commerce platforms," said Bank Indonesia Governor Perry Warjiyo in his office, Thursday, November 15, 2018. On the other hand, BI in recent years has continued to expand the use of electronic money and electronic transactions. One of the most advanced ones is non-cash payments on the toll road using electronic money which is targeted to reach 100 percent. That is, all toll roads in Indonesia are expected, both old and new ones to be built, must have introduced this to users. the use of electronic money is indeed increasingly popular in the community, especially as a payment instrument for modes of transportation and online trading, aka e-commerce. In the future, he said, Bank Indonesia will continue to strengthen this payment system model in supporting national economic activities (Pebrianto, 2019).

They buy a form of value (mobile money), whose ownership they acquire, in exchange for another form of value (cash or deposits) whose ownership they relinquish. A quid pro quo is involved in the exchange, which implies that the funds received by the MNO against mobile money issuances are no longer customer owned – their ownership transfers from the customers to the MNO.

The concept of electronic money is rather ambiguous. Under the electronic money, people often understand the accounting system of rights to public and private currency. Currently, these systems use electronic storage media. However, it is useful to note, that such systems, as well as non-cash payments, were around thousands of years ago (Rupeika & Uraev, 2015).

Every year electronic payment systems reach a new stage of development. The issue of payment through open networks has become important due to the rapid growth of electronic commerce in the last decade. Electronic payment systems should provide people with the necessary infrastructure to facilitate payments. Today EPS have become an integral part of trade and entrepreneurship. In a world full of Internet technologies and new inventions the popularity of virtual or digital currency has been increasing for the last few years. It should be noted that these expressions are used as a synonym. This interpretation is followed by the European Central Bank and the Financial Crimes Enforcement Network (FinCEN) and the FBI in their official documents use the term "virtual currency" as common and the only one; thus, it will continue to treat these concepts as synonymous (Dolgachev, 2018).

2.3. Hypothesis Development

2.3.1. Perceived Usefulness

According to TAM, perceived usefulness can lead to behavioral intention. Davis (1989) defined perceived usefulness as the degree to which “a person believes that using the system will enhance his or her performance”. This proposition is justified from the perspective that people’s intentions to use the technology will be greater in spite of their attitude toward the technology alone if they expect a technology to increase their performance on the job. Zhou (2011) indicated that structural assurance and information quality are the main factors affecting initial trust which, in turn, affects perceived usefulness and both factors predict the usage intention of E-money services. In the

context of mobile business service, researchers found that perceived usefulness is a vital factor determining the adoption of E- money service since users consider its benefits (Kleijnen, Wetzels, & and Ruyter, 2004).

In TAM framework, perceived usefulness is hypothesized to be the direct predictor of behavioral intention to use of the technology of interest (Park et al., 2014). Previous studies indicated that PU is positively associated with continuance intention in the context of e-text (Baker-Eveleth & Stone, 2013), instant messaging.

According to TAM, perceived ease of use and perceived usefulness are moderating variables that directly influence attitude toward the use of new technology and behavioral intent to use new technology. Within the context of this research, it seems likely that prior experience should directly affect perceived usefulness, but that manipulations of the subject's perception of the ease of use of a technology might influence behavioral intention. Due to the attitudes and perceptions formed on the basis of their prior experience. Subjects with a high level of experience might be less susceptible to this influence than those who lack any relevant prior experience. Subjects with a high level of prior experience exposed to a stimulus message framing use of internet communication tools as easy/beneficial to use should have a more positive behavioral intention than either subjects with a low level of prior experience and those exposed to a message framing internet communications tools as difficult to use (Irani, 2000).

According to Irani (2000), one of the key findings of this research involves the implication that relevant prior experience interacts with perceived usefulness to serve as

a highly significant predictor variable of behavioral intent toward usage, while the attitude variable seems to have little impact. The implications of this finding are important, since although most individuals know it and have pre-existing attitudes about the internet in general. It is still relatively young and still evolving communication medium. The level of usage and consequently experience of internet communication tools within an agricultural audience is likely to be relatively low compared to the usage of the internet itself as a purely information tool. Even in the classroom setting, many students' experience of these technologies is limited to browsing a Web page as part of a class assignment or to gain material for research.

TAM posits that perceived usefulness is determinant to the intention to use a technology, which is subsequently determinant of actual use. Knowledge of the predictive power of perceived usefulness on behavioral intention, both within and among contexts, becomes valuable to researchers. This is due to the fact that researchers must include relevant constructs in their models, yet must produce models that are parsimonious (Dohan & Tan, 2013).

Perceived ease of use as defined by Davis (1989) refers to the degree to which a person believes that using the particular system would be free of effort. The research by Taylor & Strutton (2010) showed that Perceived ease of use has both direct and indirect effect on intention to use E-Marketing through AT. Therefore, the researcher posits the firs hypothesis:

H1: There is a positive relationship between perceived ease of use of e-money and perceived usefulness of the use of e-money.

2.3.2. Attitude Toward Using

Understanding of the attitude according to Syamsudin (1997) is a behavior or movement that appears and is displayed in its interaction with the social environment. This interaction has a process of silencing each other, influencing and adapting to one another with the social environment.

New technology can be predicted using consumer attitudes and behaviour toward new technology. The Technology Acceptance Model (TAM) appears to be model for measure attitudes and behaviour of customer toward new technology that widely used and accepted (Burton-Jones & Hubona, 2006)

According to Davis (1989), perceived usefulness and perceived ease of use are major beliefs that influence attitude toward system use and eventually lead to actual system use. TAM has been highly regarded both because of its parsimony and because of its high predictive power in explaining IT acceptance behavior across various contexts (Viswanath Venkatesh & Morris, 2000).

Attitude toward using new technology as defined by Davis (1989) refers to a physical tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor. Attitude toward using new technology has direct effect on intention to use technology (Fishbein & Ajzen, 1975).

Behavioral intention is in turn determined by attitude towards using the technology and by perceived usefulness. Attitude toward system use is postulated to

partially mediate the effect of perceived ease of use and perceived usefulness on behavioral intention (Kim, Chun, & Song, 2009).

Attitude toward a behavior is defined as an individual's positive or negative evaluation of performing the behavior. It involves an individual's judgment that performing a behavior is good or bad and also a general evaluation that an individual is inclined or disinclined to perform the behavior (Ajzen & Fishbein, 1980).

Attitude toward system use is conceptually and empirically distinct from the strength in the attitude (e.g., weak or strong). An attitude affects an individual's behaviors by filtering information and shaping the individual's perception of the world (Fazio, 1986), whereas the strength in the attitude amplifies or neutralizes the effect of the attitude on behaviors (Petty & Krosnick, 1995). For example, a user that feels helpfull by using certain technology may continiously use that technology. If a user feels unfavor by using certain technology, they will leave that technology and seek for a new technology.

H2a: There is a positive relationship between perceived usefulness and attitude toward the using of e-money.

H2b: There is a positive relationship between perceived ease of using e-money and attitude toward the using of e-money.

2.3.3. Behavioral Intention to Use

A user who believes the capable of using an e-business application will exhibit correspondingly a behavioral intention to use that application. Shim et al. (2001)

predicted perceived behavioral control would positively impact behavioral intention of users to search online. Moreover, George (2002) suggested that perceived behavioral control has a direct effect on the user's attitude toward using the internet for online purchase. In addition, Puschel (2010) found that behavioral control significantly affects intention to adopt E- money.

BI as defined by Davis (1989) refers to the strength of the prospective adopter's intention to make or to support the adoption decision in their company.

Therefore, the researcher proposed the first hypothesis:

H3a: There is a positive relationship between attitude of using e-money and behavioral intention to use e-money.

H3b: There is a positive relationship between perceived usefulness of e-money and behavioral intention to use e-money.

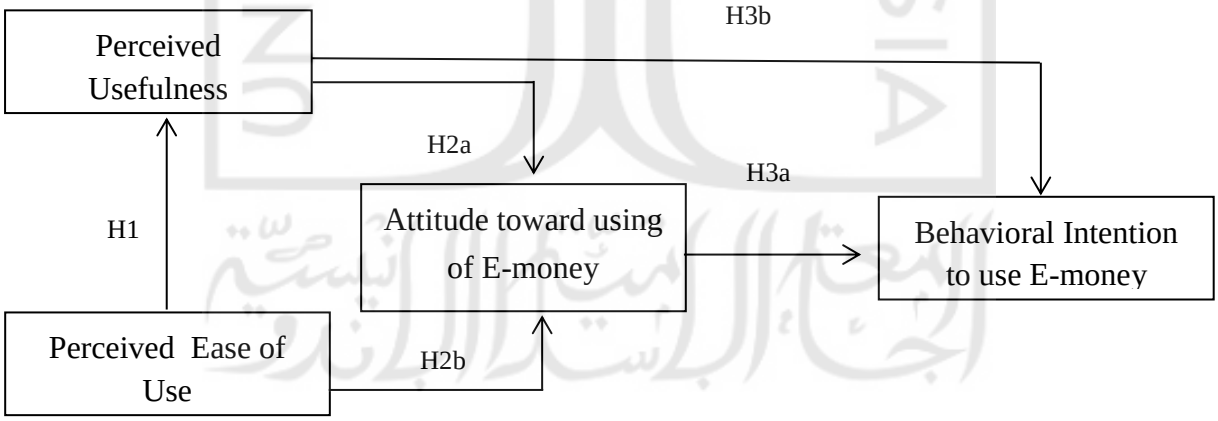


Figure 2.2: E-money on TAM Path Analysis