

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

This Chapter will explain the Theory of The Study, Dependent Variable Meaning, Independent Variable Meaning, Conceptual Framework, Hypotheses Development, and Summary. These will assist the reader in understanding the topic of the research.

2.2 Historical Background

Technological development and modernization over the past decades have changed the structure of the payment system. For example, in developed countries like the US, UK, etc., the use of cash for transactions has fallen and it has been replaced by non-cash (cashless) payment instruments like cheques, debit/credit cards, etc. (Humphrey, 2004). According to the World Payments Report 2016, globally non-cash transaction volumes have increased, and above 90% of transactions are non-cash (cashless) in most of the developed countries (Patel and Amin, 2012). Thus, this revolution in technology has led to the shift towards non- cash (cashless) payment platforms or a non-cash (cashless) society. The term “cashless society” was first proposed by Reistad (1967) as a society in which electronic funds transfer takes over the place of paper currency.

Worthington (1995) defined a non-cash (cashless) society as, a “society where clumsy and expensive to handle coins and notes are replaced by efficient electronic payments initiated by various types of plastic cards”. Ejiofor and Rasaki (2012) conceptualized a non-cash (cashless) economy as, an “economy where purchases and transactions are done mainly by electronic means and rarely by cash”. It does not refer to the complete exclusion of cash activities from the economic system but one in which the amount of cash-based activities is maintained at the lowest level (Achor and Robert, 2012; Yaqub et al., 2013). Over the last 20 years, various aspects of the non-cash (cashless) economy have gained the attention of researchers and impressively been presented in the literature.

Money has gradually evolved from commodity money (i.e. barter system) to notes, coins, cheques, and plastic money (i.e. cards). The barter system involved high transaction costs in terms of time and effort. Hence, paper money and metallic money i.e. coins have evolved. However, people prefer banknotes to coins to hold or transact due to the cost associated with coins (Chinnammai, 2013).

2.3 Theory of the Study

2.3.1 Theory of Planned Behavior (TPB)

This study primarily uses the Theory of Planned Behaviour model (TPB) which explains the most dominant variables affecting the intention to use electronic money, and it also incorporates locus of control as a variable that allegedly moderates the relationship between independent variables and dependent variables.

According to TPB theory, a person's behavior can be predicted from intent, where intent can be predicted from attitudes toward behavior subjective norms, and perceived behavioral control (Ajzen, 1991). If we can find out the reasons behind the behavior people who use electronic money, then policymakers, electronic money publishers, and traders can develop strategies to increase the use of electronic money. This theory is applied to study the behaviour of electronic money usage by a society which can also be referred to as consumers of electronic money. This theory has also been widely used to predict consumer behavior as among others, the behaviors related to credit card use (Rutherford & DeVaney, 2009), internet banking (Adityasto & Baridwan, 2012), mobile banking (Luarn & Lin, 2005), Sukuk (State Shariah Securities), investment (Warsame & Ireri, 2016), online shopping (Lin, 2007), and many more. This study aims to find the factors that influence the intention to use electronic money by using the approach of the Theory of Planned Behavior model (TPB) with LOC as a moderating variable.

2.3.2 Theory of Technology Acceptance Model (TAM)

The theory of Technology Acceptance Model (TAM) developed by (Fred & Davis, 1989), explains the acceptance of technology that will be used by technology users. This theory was adopted from several models that were built to analyze and understand the factors that influence the acceptance of the use of new technologies, including those recorded in various literature and references on research results in the field of information technology are Theory of TAM and *Theory of Planned Behavior (TPB)*. (Davis et al., 1989), tried to further develop the TAM model to see the acceptance of the use of computer technology where the acceptance of its use is determined by the attitude of behavior and perceived usefulness (Davis et al., 1989; Korry et al., 2017; Ifeanyichukwu, 2016).

Perceived benefits and perceived ease of use of new technologies affect one's attitude to the use of the technology itself, which in turn will determine whether someone is interested in using technology. As long as the individual feels that technology is useful in his duties, he will be interested in using it regardless of whether the technology is easy or not easy to use. This TAM model shows that when users are presented with new

technology, several variables influence their decisions about how and when they will use it. Thus, according to (Davis, 1989), the perception of benefits and ease are the basic determining factors of technology user acceptance.

2.4 Dependent Variable

Transaction electronic money is an electronic payment instrument obtained by first depositing a certain amount of money to the issuer, either directly or through issuing agents, or by debiting an account at a bank, and the value of the money is entered into the value of money in money media. electronic money, which is expressed in Rupiah, which is used to make payment transactions by directly reducing the value of money in the electronic money media. The use of electronic money is different from the use of a debit card or credit card. The use of some electronic money does not require authorization at the time of making a transaction (Retnowati & Mardikaningsih, 2021).

The positive impact for electronic money users will be a lot of efficiency. For example waiting time for counting cash, time for calculating change, and so on. In addition, when traveling everything can be more practical, without carrying a lot of cash. Sometimes special discounts and discounts are available for electronic money users.

For the national economy, of course, electronic money has a good impact. With a faster and easier transaction process, the level of public consumption will increase. The circulation of money is getting faster and triggering the development of the real sector. More and more businesses in the real sector are attracting investors.

Negative impact for users of electronic money, the ease of transactions creates a tendency to be extravagant. If in the past when money ran out people had to go to an ATM and take cash, now many shops serve payments with e-money. So a wise attitude is needed in using e-money as a transaction tool.

The high use of electronic money has led to rampant fraud through cyberspace as well. Data theft, electronic money theft, all of that must be anticipated. Therefore, the government needs to innovate in cyber systems and promote cyber police. Users of electronic money services must also be more vigilant.

The use of electronic money is felt to be more efficient when compared to cash. When transacting with electronic money, people do not need to prepare money that fits the results of the transactions made. The use of electronic money is also considered capable of reducing barriers to accessing the financial industry in the future. The use of electronic money as an alternative to non-cash payment instruments shows that there is considerable potential to reduce the growth rate of cash use. Electronic money also offers transactions

that are faster and more convenient than cash, especially for transactions of small value. The security and speed of this transaction is undoubtedly a necessary and quite effective commodity for the creation of a cashless society, namely a society that uses minimal cash payment transactions, this is indicated by the increasing number of trading centers and various types of companies that accept payments non-cash payments.

Currently, transactions with electronic money can be widely used in various places, from buying credit, shopping at malls to paying electricity bills to other bills. In addition, with the rise of e-commerce or electronic commerce, non-cash transactions will also increase, and the volume and value of transactions with electronic money will also increase (Darmawan, 2012). However, the use of electronic money also has obstacles for the community (Durgun & Timur, 2015).

The problem with using electronic money is the lack of knowledge about electronic money. The lower middle class or those who live far from the city are less aware of the existence of electronic money. They still do not know the advantages of using electronics. people also tend to believe more in using cash in various transactions. In addition, some shops or markets do not use a payment system using electronic money. These shops do not cooperate with banks or have equipment such as EDC machines or barcode scanning machines. Thus, the public also needs to prepare cash and electronic money. Another obstacle when using electronic money is the limited amount of money available. So that some large transactions cannot be done. The use of electronic money is an internet-based technology. If there is no internet, electronic money cannot be used. The limitations of the internet network make people unable to make transactions using electronic money. Electronic use is considered safer than carrying cash when making electronic money. But in reality, electronic money can be hacked. Some electronic money does not have a security code for transactions, so if the electronic money card is lost it will be easy for other people to use the money. Electronic money that uses a security code is also not free from the possibility of being hacked. Online hackers can hack electronic money so that it will pass to someone else. Thus, electronic money also has a risk of loss. 6 main factors become challenges and obstacles in non-cash transactions. These factors are user acceptance, security, infrastructure availability, social and cultural factors, user convenience, and user preferences.

2.5 Independent Variable

2.5.1 Risk

Risk is a situation where there is a lack of security in the use of cashless

transactions, including errors or transactions without the approval of one and/or both parties (seller and buyer). In transacting using cashless transactions, the risk becomes a concern in paying for cashless transactions. Users will question whether using cashless transactions tends to be safe or not. This causes the risk to become one of the obstacles in using cashless transactions. The risk also includes the situation of having important financial information breached by irresponsible hackers. Thus, the lower the risk of using cashless transactions, the higher the user's intention to transact cashlessly (Sitompul et al., 2022).

Perceived risk is a perception of uncertainty and unintended consequences of using a system. Risk is the uncertainty that users will accept when using e-money, including financial risk, performance risk, psychological risk, physical risk, and social risk. Several indicators are used to measure perceived risk as follows:

- a. In the form of a certain risk
- b. Experiencing a loss
- c. Thinking that it's risky

2.5.2 Benefit

Benefits are customers' feelings about the ability of a new service that can provide many benefits to them. In addition, according to a study on the factors that influence the use of Mobile Payment Services in Vietnam, the benefits of using cashless transactions are a determining factor for the use of this type of payment. Perception of usefulness according to (Davis, 2020) can be measured through work more quickly, and usefully, increase productivity, enhance effectiveness, and improve job performance.

Perceived usefulness is a subjective possibility of potential users using electronic money to facilitate transactions. Performance can be done easily so users will get better benefits. Several indicators regarding the perceived benefits of a technology system, namely:

- a. Make work easier and faster
- b. Increasing productivity
- c. Increase effectiveness

2.5.3 Trust

The trust factor is an indication of the use of cashless transactions. User trust in using cashless transactions is a condition where users feel comfortable, and secure, and are not afraid to take risks when transacting. According to a study conducted by (Siau & Shen, 2018), the sense of trust that grows in users is divided into two, namely, trust in technology systems and trust in company services. User confidence in the use of high cashless

transaction payment systems will encourage users to increase the use of cashless transactions. In addition, when making transactions, users hope that their personal information is guaranteed to be safe (Zhou, 2019).

Here the concept of the level of trust is the reliability of the electronic money service provider in guaranteeing the security and secrecy of the instructions used by consumers to make their users more trusting. This shows that a person's high level of trust will affect a person's interest in using a system. Trust is needed by technology users to improve individual performance in carrying out organizational or company activities. Several indicators to measure consumer confidence:

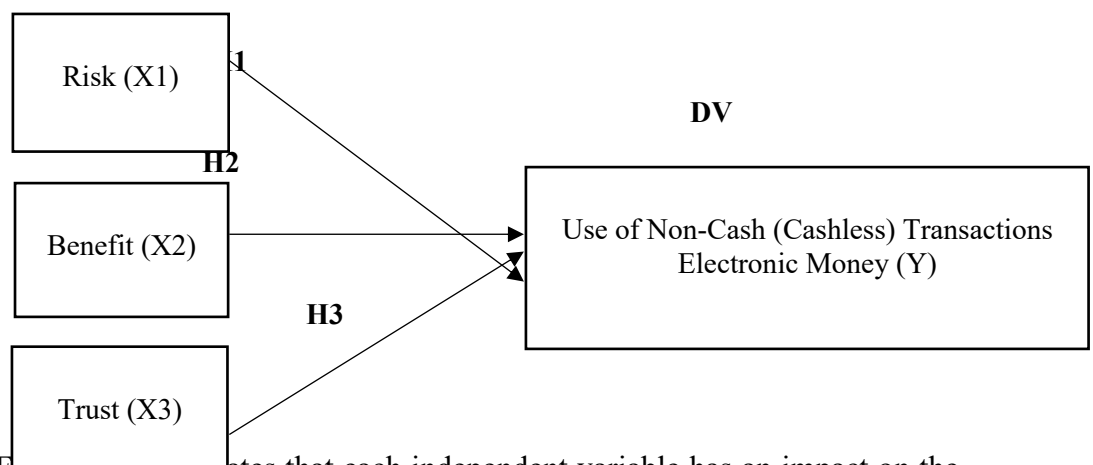
- a. ability
- b. Kindness
- c. Integrity

2.6 Conceptual Framework

Based on the literature review above, this study proposes a conceptual framework as illustrated in Figure 2.

Figure 2.1 Factors Affecting the Use of Non-Cash (Cashless) Transactions

IV



Framework illustrates that each independent variable has an impact on the dependent variable used in this study. In this theoretical framework, there is 3 dependent variable there are Risk, Benefit, and Trust. The independent variable supports the dependent variable which is Use of The Non-Cash (Cashless) Transactions Electronic Money.

2.7 Hypotheses Development

A hypothesis is a temporary response/conclusion made to solve a research topic

that has yet to be empirically tested. The hypothesis in dispute is an accusation that may or may not be true. This study uses one dependent variable and three independent variables.

2.7.1 Risk

(Jebran and Dipanker, 2012) identified security, privacy, and risk as safety issues that can affect Non-Cash (Cashless) transactions. Results also consider security and risk as one of the reasons why they use of the non-cash (cashless) transactions electronic money. This research examines this variable as one factor that affects customer attitudes toward e-money usage. Thus, the lower the risk of using cashless transactions, the higher the user's intention to transact cashless.

In the context of transactions, the resulting hypotheses are:

H1 : *Risk has a negative effect on the use of Non-Cash (Cashless) transactions*

2.7.2 Benefit

Due to the unique characteristic of the e-money cards that was explained in the literature above, the model to measure the adoption of e-money cards could be explained by the Technology Acceptance Model (Davis et al, 1986) and several kinds of literature on e-payment. Based on Technology Acceptance Model (TAM), the intention to use new technology can be predicted by perceived use and perceived ease of use for that technology. Previous research about the adoption of various e-commerce activities also used TAM to predict the adoption, more useful and/or easier to use, the customer should be more willing to adopt (He & Peter, 2007; Ozkan, et al, 2009) and to measure acceptance of new technology (Burton-Jones and Geoffrey, 2006; King and He, 2006; Schepers & Wetzels, 2007).

Previous research also has determined easiness, velocity, and efficiency as the motivation of users to use e-money (Bank of Indonesia, 2006). Characteristics of e-money support that interoperability, portability, reliability, flexibility, convertibility, efficiency, ease of integration with applications, and ease of use are what customers perceived when they use of non-cash (cashless) transactions electronic money as payment methods (Heikkila, 2000; Okamoto, 1991). In-depth questionnaire results also identified that customers used e-money as a payment method because of the benefits of e-money that save their time, ease of use, efficiency, and security than cash payment.

Therefore, the hypotheses obtained is:

H2 : *Benefits have a positive effect on the use of Non-Cash (Cashless) transactions*

2.7.3 Trust

According to (Mayer et al., 1995), trust reflects the willingness of a person to be in vulnerability based on positive expectations toward 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. The 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 the 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 a significant effect on attitude toward the use of technology. Therefore, the hypothesis obtained is:

H3 : *Trust has a positive effect on the use of Non-Cash (Cashless) transactions*

2.8 Summary

Based on the conclusion of the literature review, This chapter mainly contains a summary of the literature review and how the authors come up with hypotheses in the second subtopics which also theoretical background. This chapter also contains a conceptual framework.