

## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Background**

Technological progress is something that humans cannot avoid in this life, because technological progress will go according to the advancement of science. Every innovation is created to provide positive benefits for human life. In this modern times, humans are now very dependent on technology. This is what makes technology a basic need for everyone. Technological developments continue to develop drastically and continue to evolve until now and increasingly worldwide. This can be proven by the increasing number of advances in technology that are becoming increasingly developed such as digital technology and can help all human activities. Even smartphone technology that was originally only a wireless communication device developed into smartphone technology that can take photos, record videos, listen to music, and technology advances that are very prominent from smartphones is accessing the internet in seconds.

According to Kompas.com Indonesia's population currently reaches 262 million people. More than 50% or around 143 million people have been connected to the internet network during 2017, according to the report of the Association of Internet Service Providers in Indonesia (APJII). The majority of 72.41% internet users are still from the urban community. Its utilization has gone further not only to communicate, but also to be able to buy goods, order transportation to do business.

From the development of the internet, the emergence of advances in fintech technology that provides facilities to pay in electronic payments has become one of the lifestyles of people in this modern era. Fintech comes from financial technology or financial terms. According to The National Digital Research Center (NDRC), in

Dublin, Ireland, defines fintech as "innovation in financial services" or "innovation in financial services fintech" which is an innovation in the financial sector that gets a touch of modern technology. Financial transactions through fintech include payment, investment, money lending, transfers, financial plans and comparison of financial products. The development of Fintech in Indonesia are increasingly rapid, as evidenced by the emergence of many Fintech-based startup companies in recent years. The startup business in Indonesia continues to grow, one of which is now dominating is the new financial technology industry or commonly called Fintech.

According to Rasyid 2019 financial service industry has experienced innovation that was very significant in line with the rapid development of digital technology today. Financial service innovations that have been influenced by technological developments and are becoming a hot topic today are financial technology (fintech). According to the Financial Stability Board (FSB), fintech is a form of technology-based financial innovation that can be able to produce business models, applications, processes or new products with related material effects on financial markets, institutions, and financial service providers. In Indonesia, Fintech is developing in various sectors, like fast payments, loans, retail investment, remittance, fintech as an electronic payment instrument, electronic money or electronic cash, etc. The development of modern times many business people make more advanced and developing ways of making payments. One of the technologies used is using electronic money (e-money ). In Indonesia too, electronic money has the potential to replace the role of cash payments in retail transactions. Because technology and the internet have a big role in supporting all activities of human life, using of digital technology in Indonesia has an impact on several sectors, one of which is the business sector or business industry which made the online commerce or e-commerce. However, the impact of increasingly rapid technological developments and the internet not only penetrated the trade industry, but also in the Indonesian financial industry.

Payment system which initially used cash as a payment instrument has now developed into non-cash payments and can be used for online purchases, online transaction facilities, paying bills, saving money balances with a certain nominal value on an application. With the existence of fintech technology, many people have the intention to adopt the advancement of technology, intention to adopt this fintech is because users feel easy and fast, generally only carry a smartphone and in seconds can pass various transactions, not complicated to carry a wallet or cash because users can put their money in an application based on fintech or electronic money.

With the increasing development by times, people's lifestyles are increasingly dependent on the presence of information technology that makes things easier to be more practical, efficient, and can be more economical than the lifestyle before the advent of information technology. Changes in the payment system are very fast following the development of technology, this has become one of the interests of the community to use the sophistication of this technology. E-money usage grew significantly and e-money issuers also continued to grow. In electronic money usage, users can save a certain amount of money in an electronic money application and the balance of money is stored in an electronic wallet.

Realizing that smartphone are a tool that is always carried by the community besides the wallet, business people innovate by combining the functions of smartphone with wallets. With this idea, a mobile wallet service emerged. Mobile wallet is the newest form of electronic payment. Mobile wallet allows users to carry out various types of transactions, be they payments, purchases of goods or services, transfers and other services through their cellphones. This service is intended to meet customers who want non-cash services. So that smartphone can function like a money provider that is ready to be used in an easy, fast, and safe way.

According to Lukman 2014, with the convenience offered by the mobile wallet, this service is very attractive as an alternative to any payment. One of the mobile wallet services that now exists is T-cash is an electronic-based financial service that can make fluent transactions and hassle free. T-cash is an electronic financial service in Indonesia launched by Telkomsel. Where Telkomsel is the highest position among all GSM operators in Indonesia. In terms of number of users, Telkomsel also remains number one with 132.7 million users. XL Axiata managed to overtake the second position thanks to the acquisition of Axis with a total of 68.5 million users. Indosat is in third place with 59.7 million users. Tri Indonesia ranked fourth, which at the end of 2013 had around 38 million customers.

According to Ardela ST, 2017 the emergence of the Indonesian Fintech Association (AFI) in September 2015 attracted the attention of business people. With the aim of providing reliable and reliable business partners to build the Fintech ecosystem in Indonesia that comes from Indonesian companies and for Indonesia itself, this company has collected around 30% of all Fintech users in Indonesia. The development of Fintech users has continued to increase, from 7% in 2006-2007 to 78% in 2018. The number of registered users per 2017 is 135-140 companies.

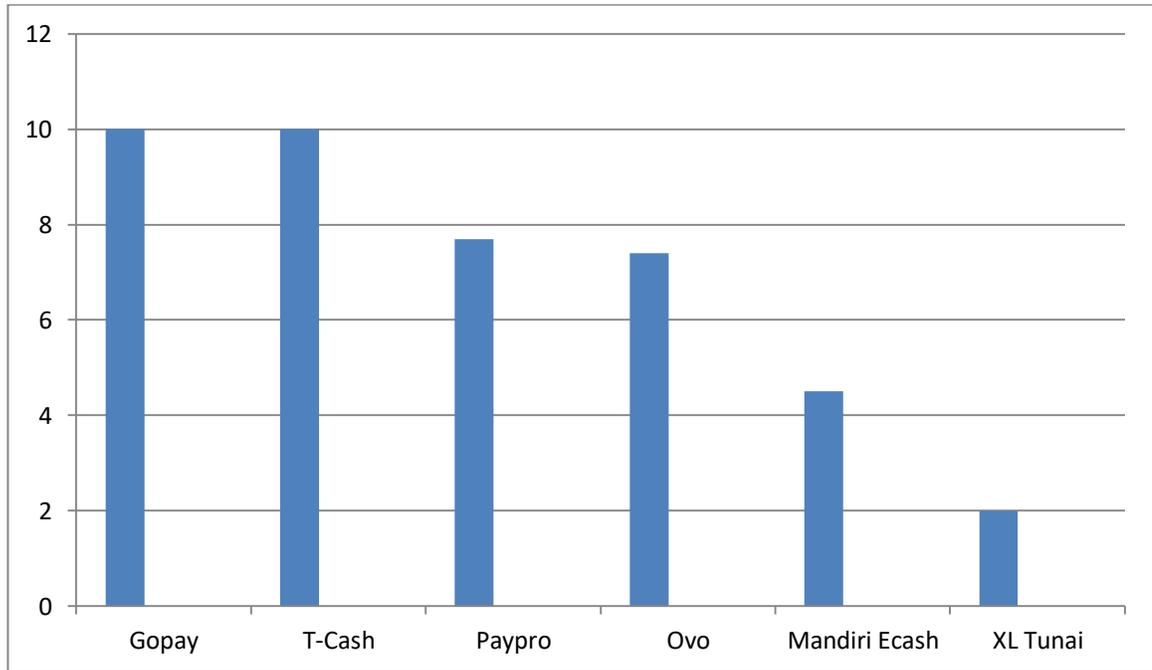


Figure Statistic 1.1 mobile payment user base

Source: MDI Ventures Mobile Payment Report (2017)

Table statistic 1.1 where it is seen that the use of electronic payments from the LinkAja (T-cash) application has many enthusiasts, although the Go-pay application has the same rating in the use of electronic payments. Despite the level of similarity in use between t-cash and go-pay but between the go-pay and t-cash applications offers a difference in the use of fintech services.

Table 1.2

## The most popular Electronic Money in Indonesia 2017

Go-pay (Gojek)	50%
E-money (Bank Mandiri)	46%
LinkAja (T-Cash)	40%
Flazz ( Bank BCA)	25%
Line Pay (Line)	17%
OVO (Lippo)	15%
BRIZZI (Bank BRI)	13%
Others	4%

Source : katadata.co.id (2017)

According to katadata.co.id, the circulation of electronic money that is often used in Indonesia in 2017 is GO-PAY. Then followed by Mandiri E-money, LinkAja (t-cash), Flazz , LINE Pay, OVO and Brizzi. This data is taken from the results of the JakPat survey in Startup Report 2017 DailySocial.Id. From the table above, there are many enthusiasts who use digital wallets in many transactions because without cash and the process is also fast, as we know electronic payments through digital wallets are included as safe because they are arranged by bank Indonesia to facilitate transactions without cash.

Among the various mobile wallet services that now exist, LinkAja (t-cash) is an attractive product to study for several reasons. LinkAja (t-cash) is the first 7 mobile wallet services in Indonesia and launched by Telkomsel. Where Telkomsel ranked first in the market share of cellular operators in Indonesia with a percentage of 55%.

Telkomsel is the operator with the most number of users compared to other operators. This shows that consumers are very interested in choosing Telkomsel service

providers. So that consumers also have an interest in deciding the choice of a mobile wallet service used by Telkomsel providers, LinkAja's mobile wallet service. According to Pertiwi 2019, The digital wallet service owned by Telkomsel's cellular operator T-Cash has transformed into LinkAja starting February 21. Even though it has been replaced, the features on the T-Cash can still be used in LinkAja services. Users will be able to carry out various transactions as before, such as paying internet, electricity, water bills, making transactions at local or national merchants, buying online and so on.

Practical enthusiasts of lifestyle are the reason for a number of increasingly popular digital services in society. One of them is the use of electronic money as a means of payment. Telkomsel is one of the operators who contribute to supporting the digital lifestyle. LinkAja (t-cash) system is directly connected to the customer's SIM card, making it suitable for a practical lifestyle that offers all the convenience of making payments. With the convenience offered, Telkomsel customers can transact Billing payments and mobile purchases only by using the LinkAja (T-cash) application on smartphones which is one of the advantages of this electronic payment application, with these advantages, LinAja (T-cash) attracts more consumers to use it.

However, currently LinkAja (T-cash) users are still unable to compete with electronic payment applications such as go-pay and ovo, this is probably due to the fact that LinkAja (T-cash) has not been thoroughly known by the public and does not yet know the overall benefits offered from the mobile wallet service for example among young people among parents who use cash more for transactions of daily necessities. In addition, the lack of interest in using the application from Telkomsel may also be due to the network at merchants who sometimes have problems so they prefer to be interested in using cash in transactions. This is also supported because in general people prefer cash as a means of payment compared to using electronic money. This fact shows that most people depend on cash as a way of life for daily payments, so that the development of electronic money still has problems related to

community preparedness in the face of a cashless society era. The purpose of consumer adoption to use LinkAja (T-cash) needs to be analyzed more to make LinkAja (T-cash) management marketing strategy more attractive among users of electronic money. Thus the public trust in the usefulness and convenience of Tcash still has to be continuously improved and maintained so that the use of electronic money can continue to grow.

With the convenience offered by mobile payment, this service is very attractive as an alternative payment for every consumer activity, so researchers are very interested in researching LinkAja (T-cash) as a mobile payment service because many enthusiasts interested in practical lifestyle are the reason for a number of digital services increasingly popular in the society.

Table 1.3

Application-Based Electronic Money Provider

Rank	Application Electronic Money	User usage
1	Tcash	15 Million
2	Gopay (Gojek)	6 Million
3	E-cash (Mandiri Bank)	5 Million
4	Paypro (Indosat Ooredoo)	4 Million
5	Tokocash ( Tokopedia)	2,5 Million
6	Rekening Ponsel (CIMB Niaga)	2,5 Million
7	Sakuku (BCA)	300 thousand

Sources : <https://databoks.katadata.co.id/datapublish/2018/02/06/siapa-pemain-uang-elektronik-berbasis-aplikasi>

Base on data above, LinkAja as m-payment still have popular in society. The reason from this popularity is because people's trust in the usefulness and ease of using LinkAja (T-cash) application with a tight situation for society activities,

LinkAja (Tcash) application needs so much to do with many activities from morning to night and to facilitate their activities such as buying credit, internet data packages, bills and other online transactions.

With some differences obtained from the 3 tables above from mobile payment user base, the most popular electronic money in Indonesia 2017 and application-based electronic money provider, do people still want to adopt LinkAja (T-cash) application or not. Surveys about the intention to adopt information technology (IT) have always been a matter of topics in information management.

Many research has been done in information systems to understand, develop and predict factors that can influence technology adoption or innovation by individuals. The purpose of this study is to identify the most significant variables of consumer intention to use / adopt mobile payment and to develop a framework that captures factors that are known to influence consumers' intention to use mobile payment based on various aspects such as TAM, like system characteristics, consumer attitudes, and variables used in TAM model specifically the influence of perceptions of usefulness, ease of use mediated by attitude and trust in intention to adopt mobile payment among customers. This study aims to examine the orientation of the Technology Acceptance model that determines the attitude of the LinkAja user application in deciding to adopt LinkAja (T-cash) Services. Technology acceptance model (TAM) is a model of acceptance of information technology systems that will be used by users. The TAM was proposed by Davis, F (1989). The theory was adapted from the Theory of Reasoned Action (TRA). This model is the most widely used for exploring user acceptance of a technology. According to this model, the use of an information system depends on perceived usefulness and perceived ease of use. Favourable or unfavourable attitudes toward any technology are a function of perceived ease of use and perceived usefulness about the technology. The perceived usefulness (PU) is an opportunity based on the user's view that specifically using an application technology can improve the user's work performance. According to TAM,

using a technology system used by users is determined by behavioral intentions and depends on the user's attitude towards the benefits that can be felt by the user and the ease of use of the technology system. To understand and to be able to predict consumers' responses it must be known how consumers perceived product of LinkAja. Here state variables that consumers perceived product LinkAja .

According to Lopez-Nicolas, Molina-Castillo, and Bouwman (2008) argued that the system should be able to assist the consumer to carry out a job easier, quicker and in better quality. According to Tobbin and Kowornu (2011), the intention to use mobile money services will increase if the belief in its usefulness also increases (Luarn & Lin, 2005). The ultimate reason people exploit the use of mobile money services is that they find them useful. Some other services introduced into the mobile services include paying of utility bills and other fees, which is likely to increase the benefit of the service to customers.

PEU is defined by Davis (1989) as "the extent to which a person believes that using a particular system will be free of problems". Davis (1989) also found that even if potential users believe that the application provided can be useful, users may at the same time believe that the system is too difficult to use and that the performance benefits of its use are greater than the effort to use the application.

Trust is willingness to be a vulnerability to a key belief in others (Rousseau et al. 1998). This vulnerability becomes more risky and uncertain especially when money is involved (McKnight and Chervany, 2001). Nor and Pearson, 2007 stated Trust has become one of the obstacles that prevent a person from adopting a technology because of sensitive hacking of personal information and identity theft. This increasingly affects the level of consumer confidence in the use of a technology (Kramer, 1999).

Culture shapes the perceptions of individuals in different ways, which consequently impacts on their decisions whether to adopt technology or not

(Erumban and de Jong, 2006). Attitudes represent how consumers feel about user attitudes towards the acceptance of new ideas and practices that are strongly influenced by the culture they live in.

Davis, F. (1989) stated Intention is determined by the attitude of a user who can be advantageous or unfavorable towards the use of the technology and the perception of its usefulness. The higher the level of intention, the higher the likelihood that the behavior will be carried out (Ajzen, I. (2011)

The purpose of this study was to use structural models to examine the relationship between perceived usefulness, perceived ease of use, perception of trust, attitude and intention to adopt LinkAja more. The results of this study will help each m-payment user to get better insight into customer perceptions about using LinkAja as a m-payment

## **1.2 Research problem**

1. Does perceived usefulness have an influence on attitude on the m-payment LinkAja in Surabaya ?

2. Does perceived ease of use have an influence on attitude on the m-payment LinkAja in Surabaya ?

3. Does perceived trust have an influence on attitude on the m-payment LinkAja in Surabaya ?

4. Does attitude have an influence on intention to adopt mobile payment in LinkAja m-payment in Surabaya ?

## **1.3. Purpose**

Based on the research problem above, the objectives to be achieved in this study include:

1. To analyze the effect of perceived ease of use on perceived usefulness on LinkAja m-payment application.
2. To analyze the effect of perceived usefulness on the attitude of the people in surabaya in adopting LinkAja mobile payment services
3. To analyze perceived of trust on attitude on LinkAja m-payment application
4. To analyze attitude toward intention to adopt LinkAja m-payment application

#### **1.4 Benefits of research**

The benefits of this research are :

The benefits of this research are to add new insights about consumer responses to users of m-payment cash applications and also to increase knowledge for readers about consumer valuation so they can understand the benefits that can be felt after using a m-payment application. This research is expected to be useful for the future of fintech so that it can be used as a reference to improve setting effective strategies to provide service that continues to innovate and it is hoped that this research can be useful for further research so that it can be used as an additional reference for further research.

#### **1.5. Systematics of thesis writing**

The systematics of writing in this study is broadly divided into five chapters, namely as follows:

CHAPTER I INTRODUCTION

This chapter explains some of the main things related to this writing which consist of research background, problem formulation, research objectives, research benefits, and writing systematics.

## CHAPTER II LITERATURE REVIEW

This chapter explains the theoretical foundation of the problems associated with this writing, including: theoretical foundations, previous research, the development of hypotheses, and research models or conceptual frameworks.

## CHAPTER III RESEARCH METHOD

This chapter describes the design of research related to data and research related to data analysis. In this chapter will describe the population and sample research, sampling techniques, measurement variables, data collection methods, research variables, data collection methods, data testing techniques and hypotheses used.

## CHAPTER IV DATA ANALYSIS AND DISCUSSION

This chapter contains an overview of research objects, the results of data collection, data descriptions, data analysis results, and discussion of data analysis.

## CHAPTER V CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter explains the research conclusions, limitations of research, and suggestions for further research.