

# CHAPTER I

## INTRODUCTION

### 1.1 Research Object Overview

#### 1.1.1 Telkomsel Overview

PT Telekomunikasi Selular or Telkomsel was founded on May 26<sup>th</sup> 1995 by PT Telekomunikasi Indonesia or PT Telkom with 51% shares and PT Indosat with 49% shares. Since 2002, Telkomsel is a subsidiary of PT Telekomunikasi Indonesia (65%) and Singapore Telecom Mobile Pte Ltd (35%).

Figure 1.1

Telkomsel Logo



Source: [www.telkomsel.com](http://www.telkomsel.com)

Telkomsel has the Indonesia's widest network coverage, with 99% 2G coverage and 65% 3G coverage. To proof its consistency in developing and providing telecommunication access from Sabang to Merauke, in 2015, Telkomsel deployed almost 18 thousands new Base Transceiver Stations (BTSS), of which 89% were 3G/4G-based, in all over Indonesia. As the 7th world's largest cellular operator, Telkomsel is the market leader in Indonesia's telecommunication industry and serves more than 150 million subscribers in 2016.

Up to now, Telkomsel has four key products and services which are kartuHalo, simPATI, Kartu As, and Loop. KartuHalo is the postpaid brand for the professionals and corporate customers segments. SimPATI is positioned as the

prepaid brand for the savvy middle class segment and is Telkomsel's award winning lifestyle prepaid brand. Next, Kartu As stands for Telkomsel's affordable and value prepaid brand. The last is Loop which is the Telkomsel's newest prepaid brand for the youth segment and focuses on offering attractive data and digital services. Besides, Telkomsel also offers other products and services such as internet service, T-Cash electronic money, bundling program, smarphone package, and Facebook card.

### **1.1.2 Vision & Mission of Telkomsel**

#### **Vision**

Be a world-class, trusted provider of mobile digital lifestyle services and solutions.

#### **Mission**

Deliver mobile digital services and solutions that exceed customers' expectations, create value for our stakeholders, and support the economic development of the nation.

### **1.1.3 T-Cash Overview**

Telkomsel has an electronic money service named T-Cash that launched in January 9<sup>th</sup>, 2007. Telkomsel is one out of five telecommunication companies in Indonesia that operate e-money transaction. Telkomsel got licensed from Bank Indonesia at July 3<sup>rd</sup> 2009. T-Cash can be used by all Telkomsel subscribers. Unlike phone credit, T-Cash enables the users to store the money and use it to any transaction.

Figure 1.2  
T-Cash Logo



Source: [www.telkomsel.com](http://www.telkomsel.com)

Features offered by T-Cash are online shopping, money transfer, mobile payment, and the newest one is T-Cash Tap adapting Near Field Communication (NFC) technology which was launched on October 2015. NFC is a data communication technology as well as a payment method. The NFC technology is implemented as a sticker and Electronic Data Capture (EDC) which is called T-Cash Tap. This enables the users only by tapping the users' mobile phone (which is stucked by T-Cash Tap sticker) to the EDC reader in the cashier, then the users inserting the six-digit T-Cash pin.

Telkomsel subscribers can activate T-Cash by contacting \*800\*88# from the mobile phone. Then after registering process, the T-Cash user can top up the T-Cash credit via any GraPARI, ATM Bersama network, or Indomaret. When the balance is topped up, the user can directly do the transaction with T-Cash in more than 530 merchants all over Indonesia. Every payment using T-Cash will deduct the T-cash credit. Some merchants like Indomaret, Coffee Bean, Baskin Robbins, Mc Donald's, and Cinema XXI offer promotions and discounts to attract the customers doing the cashless payment using T-Cash.

There are two kind of T-Cash service that is offered by Telkomsel; Basic Service and Full Service. Every registered T-Cash user is automatically subscribed for basic service with maximum credit of Rp. 1.000.000. Meanwhile, the users need to register and fulfill some documents to GraPARI to enjoy the full service. The maximum T-Cash credit for the full service is Rp. 5.000.000. Moreover, T-Cash full service enables the users to do money transfer within T-Cash account, to any bank account within ATM Bersama network, and e-money service from other providers.

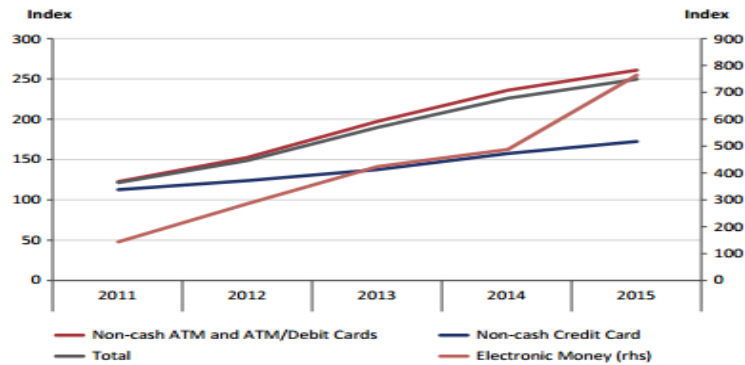
## **1.2 Background**

As people live in a global era where technology grows rapidly, payment system trend in society changes from cash into noncash payment system which is more safe and efficient. Electronic money (e-money) as a payment system alternative grows fast and follows the success of card payment system. Moreover, the growth of electronic money supports economic growth of Indonesia as a

developing country. As a country's economics grows, transaction volume also grows and affects in non-cash payment system improvement like electronic money.

Chart 1.1

Noncash Payment System Index

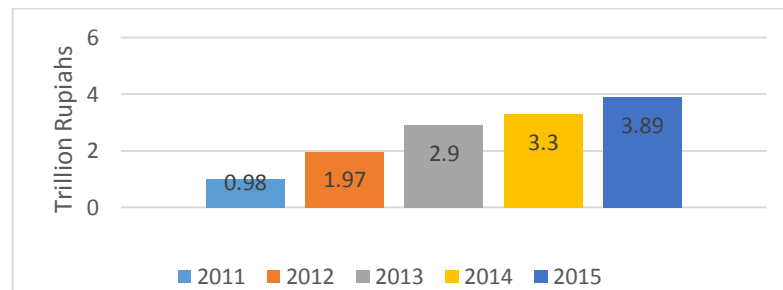


Source: Economic Report on Indonesia from Bank Indonesia, 2015

According to 2015 Economic Report on Indonesia from Bank Indonesia in the Chart 1.1, over the period from 2011-2015, the electronic money payment system index recorded the most marked improvement. This index increased from 142 in 2011 to 762 in 2015. This dramatic increase shows that electronic money being the most recently developed non-cash payment instrument. In spite of the fact that Noncash ATM and ATM/Debit cards index is the highest, the trend of payment using electronic money is going to increase.

Chart 1.2

Electronic Money Transaction Value



Source: Economic Report on Indonesia from Bank Indonesia 2011-2015.

Chart 1.2 shows the growth of electronic money transaction value from 2011 until 2015. An increase of 101% of electronic money use in 2012 from the position in 2011. It reaches Rp. 2.9 trillion through 2013, which is an impressive 47.2% hike over the previous year. In 2014, the value of transaction using electronic money reaches Rp. 3.3 trillion, an increase of 14.2% on 2013's number. The electronic money transaction value experiences another positive growth in 2015 of 59.1% from 2014.

According to 2015 Economic Report on Indonesia from Bank Indonesia, it is recorded that there are 35.7 million electronic money instruments units exist in the society for the 20 electronic money issuers in the Table 1.1.

Table 1.1  
Electronic Money Issuers

No	Issuer	Type of E-Money	Name of Product
1	Bank Central Asia Tbk	Chip Based	Flazz
2	Bank Mandiri (Persero) Tbk	Chip Based, Server Based	Indomaret Card, Gaz Card and E-Toll
3	Bank Mega Tbk	Chip Based	Studio Pass Card and Smart Card
4	Bank Negara Indonesia 1946 (Persero) Tbk	Chip Based	Java Jazz Card and Kartuku
5	Bank Rakyat Indonesia	Chip Based, Server Based	BRIZZI
6	B.P.D DKI Jakarta	Chip Based	Jak Card
7	PT. Indosat	Server Based	Dometku
8	PT. Skye Sab Indonesia	Server Based	Skye Card
9	PT. Telekomunikasi Indonesia	Chip Based, Server Based	Flexy Cash and i-Vas Card
10	PT. Telekomunikasi Selular	Server Based	T-Cash

11	PT. XL Axiata	Server Based	XL Tunai
12	PT. Finnet Indonesia	Server Based	Fin Channel
13	PT. Artajasa Pembayaran Elektronis	Server Based	MYNT
14	Bank Permata Tbk	Server Based	BBM Money
15	PT. Nusa Satu Inti Artha	Server Based	Doku Pay
16	PT. Bank CIMB Niaga Tbk	Server Based	Rekening Ponsel
17	PT. Bank Nationalnobu	Server Based	Nobu E-Money
18	PT. Smartfren Telecom	Server Based	Uang Ku
19	PT. MVCommerce Indonesia	Server Based	Ponsel Pay
20	PT. Witami Tunai Mandiri	Server Based	True Money Witami

Source: <http://ww.bi.go.id/2015>

During 2015, there is an addition of an issuer of electronic money, from 19 to 20. This addition reflects the growth of e-money users and infrastructure. The issuers are split into 10 non-bank institutions and other 10 are from bank institutions (Table 1.2). Meanwhile, 5 of the non-bank institutions come from Multinational Telecommunication Operators, they are PT Indosat, PT Telekomunikasi Indonesia, PT Telekomunikasi Seluler, PT XL Axiata, and PT Smartfren Telecom.

T-Cash stands as the second biggest position with 26% portion of electronic money market share in Indonesia, right after Kartu Flazz from PT Bank Central Asia (BCA), Tbk with 46% of the total market share of electronic money (Lukman, 2015).

Table 1.2 shows that the number of registered users is still low even it is already around for seven years. In 2015, it is only 11.14% of total Telkomsel subscribers who registered as T-Cash users. The increase of number is not significant if we compare to the percentage of T-Cash users as the percentage of

Telkomsel subscribers in 2011 which reaches 7.47%. T-Cash only experience 3.67% increase of total registered users within five years.

Table 1.2

T-Cash Registered Users

<b>Year</b>	<b>Telkomsel Subscribers (in Millions)</b>	<b>T-Cash Registered Users (in Millions)</b>	<b>Percentage of Total T- Cash Users as Percentage of Telkomsel Subscribers</b>
2011	107	8	7.47%
2012	125	11.6	9.28%
2013	131.5	13	9.88%
2014	140.6	15	10.66%
2015	152.5	17	11.14%

Sources: PT Telekomunikasi Selular Annual Report, 2011-2015.

Up to 2016, T-Cash is available in some cities in Indonesia such as Jakarta, Bogor, Depok, Tangerang, Bekasi, Bandung, Surabaya, Semarang, Yogyakarta, Bali, Medan, and Makassar. The big expansion of T-Cash will be started from the second quarter of 2016 with target of 5 million – 6 million T-Cash active users since the active users until early 2016 is only about 300 thousand users or only 1.76% of the total T-Cash registered users ([www.blog.telkomsel.com](http://www.blog.telkomsel.com)). The number of active users is still relatively low, but parallel with the national target with big merchant expansion up to 30 thousand outlet in 2016, the 5-6 million active users is expected to be achieved by the company.

Even though the total market share of T-Cash is lesser than BCA Flazz, the gap between the number of active users and the company national target emerges the urgency for the company to be solved, so that this study is important due to its contribution to explore the factors that are supporting and inhibiting the T-Cash adoption.

The low number of active T-Cash users in Indonesia is because electronic money is kind of new service where the society does not know the usefulness of it really well so that the adoption is still quite low in Indonesia even it has been around for seven years. Survey that had been conducted by Bank Indonesia in campus and 12 cities showed that the consumers understanding and consumers' intention of e-money is still not optimal (Bank Indonesia, 2013). The society awareness and understanding of electronic money are the two main problems here. Besides that, the interoperability product of e-money is not very well coordinated makes the consumer has to use more one instrument of e-money (Khatimah & Halim, 2014).

In September 2016, the writer conducts preliminary data gathering in the form of interview to 30 respondents to know the benefits and grievances of T-Cash users. The result is shown below.

Table 1.3

Reasons of Using T-Cash

No.	Reason	Percentage
1	Payment using T-Cash is practical	30%
2	My close friends using T-Cash	23.3%
3	Many promotions offered by T-Cash	16.7%
4	Many merchants associated with T-Cash	16.7%
5	T-Cash is safe	13.3%

Source: Writer's Data, 2016

Table 1.4 shows the reasons why Telkomsel subscribers are willing to use T-Cash as an electronic money payment in their daily transactions. 30% of them state that using T-Cash as the cashless payment is practical which means it is easy to do since the users only need to tap the T-Cash Tap sticker to the EDC reader and it directly deduct the balance. 23.3% respondents claim that the environment affect the decision to adopt T-Cash. Further, related to the merchants associated with T-Cash, 16.7% respondents say that they use T-Cash since there are many merchants that accept T-Cash and they offer promotions such as discounts and free gifts when



T-Cash is used in the transaction. The rest, which is 13.3% respondents say that they use T-Cash because it is safe.

Moreover, some complaints are also explained by the respondents regarding the using of T-Cash. The complaints are shown in Table 1.4.

Table 1.4

Complaints of Using T-Cash

<b>No.</b>	<b>Reason</b>	<b>Percentage</b>
<b>1</b>	Hard to leave cash payment method	33.4%
<b>2</b>	Hard to top up	30%
<b>3</b>	Many T&Cs on promotions	13.3%
<b>4</b>	Hard to register	13.3%
<b>5</b>	The network gets error sometimes	10%

Source: Writer's Data, 2016

The complaints above show that people are still really into cash payment method rather than noncash payment method using e-money, it is shown from the 33.4% of respondent in table 1.5 state that is hard to leave the habit. Besides, 30% respondents say it is hard to top up the T-Cash credit, 13.3% say there are too many terms and conditions to get the promotion of T-Cash, 13.3% respondents claim that it is hard to register T-Cash, and 10% of them state that the network is sometimes error so that the payment using T-Cash cannot be successful.

Due to the low society awareness in facing cashless society era, the electronic money knowledge and implementation in daily transaction need to be risen. The success of a technology adoption can be achieved when the number of user gets higher time to time.

T-Cash is originally launched in Jakarta, Bogor, Depok, Tangerang, and Bekasi. The cities expansion is started in the second quarter of 2015 to other big cities in Indonesia such as Bandung, Surabaya, Medan, Makassar, Yogyakarta, and

Semarang (Telkomsel, 2015). To focus the study, then the cities which are located in Java Island are chosen as the place to conduct the study. The qualitative study with in-depth interviews are done directly with random respondents in the cities to collect and support the data in the study.

Based on the explanation above, the author would like to conduct a research which is entitled **“EXPLORING FACTORS INFLUENCING ELECTRONIC MONEY ADOPTION (Qualitative Study of T-Cash)”**.

### **1.3 Problem Statement**

The electronic money payment system index in Indonesia recorded the most marked improvement over the period from 2011-2015 and the trend is still increasing. T-Cash, the second biggest electronic money in Indonesia, has been around for seven years but number of registered yet active users is still low. Factors influencing the adoption of T-Cash need to be studied due to the target of Telkomsel with 5 million – 6 million T-Cash active users in the end of 2016 so that solutions can be formulated and be applied.

### **1.4 Research Question**

According to the explanation above, the research questions are formulated as follows:

1. What are the reasons that drive Telkomsel subscribers register for T-Cash?
2. What are the factors driving T-Cash adoption in the users' life?
3. What are the factors inhibiting the use of T-Cash?

### **1.5 Objectives**

According to the formulated research questions, the aims of the research are mentioned below:

1. To know the reasons that drive Telkomsel subscribers registering T-Cash.
2. To know the factors driving T-Cash adoption in the users' life.
3. To know the factors inhibiting T-Cash use.

### **1.6 Significance of the Study**

### **1.6.1 Business Aspect**

This research will be useful for electronic money issuers especially in Indonesia to explore additional knowledge in the field of marketing management. The result can be used by Telkomsel as an input and recommendation in order to do the further T-Cash development.

### **1.6.2 Academic Aspect**

The findings of this research gives an information and knowledge regarding electronic money use in Indonesia, especially for T-Cash. In addition, some of the findings revealed in this research is also expected to be used as the reference for further research about electronic money adoption.

## **1.7 Research Scope**

This research need a restriction to keep it consistency, so the problem encountered is a focused discussion. Some limitations are set according to the needs of the research.

### **1.7.1 Location and Object of Study**

The location of the object study is conducted in Jakarta, Bogor, Depok, Tangerang, Bekasi, Bandung, Surabaya, Semarang, and Yogyakarta with T-Cash users as the object.

### **1.7.2 Time and Period**

The period of this study starts from October 2016 until December 2016.

## **1.8 Writing Systematic**

### **CHAPTER I : INTRODUCTION**

This chapter briefly shows the research object overview, research background, problem statement, research question, research objectives, and research writing systematic.

### **CHAPTER II : LITERATURE REVIEW**

This part tells about theories, previous researches, framework, hypotheses, and scope of the research.

### CHAPTER III : RESEARCH METHODOLOGY

This chapter explains the research type, operational variables, research steps, population and sample, data collection, validity and reliability test, and data analysis method.

### CHAPTER IV : RESULTS AND DISCUSSION

This part consists of chronological and systematical result of the research based on the problem statement and objectives of the research.

### CHAPTER V : CLOSING

This last part of the research contains conclusion, research limitations, and suggestions of the research.