

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

In recent years, technologies are moving in a fast pace and had succeeded in dominating the world. These technologies have certainly brought greater efficiency and effectiveness in people's life and many conveniences can be felt through the usage of these technologies. Due to these reasons, it has now become part of people's life, as everyone starting from the young to the old is deeply involved in it. One of the famous developments in technology is the invention and the presence of internet. According to the Association of Indonesian Internet Network Providers or which is known as APJII (Asosiasi Penyelenggara Jasa Internet), there are 143 millions of people who are connected to the internet network in the year of 2017. This number is an increase from the previous years of year 2014 and 2016 on which only 88 millions of people and 132.7 millions of people who are connected to the internet network.

According to Jamulal Izza (2016), the head of the Association of Indonesian Internet Network Providers (APJII), the main source of the increase in the numbers of people who are connected to the internet over years are because of the development of the infrastructure and the easiness to get smartphone or handled devices. There are around 67.2 millions of people or around 50.7% of Indonesian people who access the internet network through handled devices and computer. While there are around 63.1 millions of people or around 47.6% of Indonesian people who access the internet network through smartphone. Then there are around 2.2 millions of people or around 1.7% of Indonesian people who access the internet through computers.

These people who accesses the internet tend to like things to be more digitalized. This includes the digitalization of payment system on which, people are no longer using convectional money to pay for what they need. So people usually likes to use electronic money or better known as e-money to pay for what

they need. The increasing interest of the people towards the usage of e-money had encourages many companies to try to launch their own e-money in the market. According to the data published by Bank Indonesia in 2018, there are a total of 28 companies that had launched their own e-money in Indonesia and those companies had gained permission for it. These companies are listed in Table 1.1.

**Table 1.1**  
**The List of E-money Publishers in Indonesia**

No.	Nama	Surat dan Tanggal Izin	Tanggal Efektif Operasional
1.	PT. Artajasa Pembayaran Elektronik	No. 14/327/DASP tanggal 9 Mei 2012	21-Nov-12
2.	PT Bank Central Asia Tbk	No. 11/424/DASP tanggal 3 Juli 2009	03-Jul-09
3.	PT Bank CIMB Niaga	No. 15/119/DASP tanggal 13 Februari 2013	27-Mar-13
4.	PT Bank DKI	No. 11/429/DASP tanggal 3 Juli 2009	03-Jul-09
5.	PT Bank Mandiri (Persero) Tbk	No. 11/434/DASP tanggal 3 Juli 2009	03-Jul-09
6.	PT Bank Mega Tbk	No. 11/443/DASP tanggal 3 Juli 2009	03-Jul-09
7.	PT Bank Negara Indonesia (Persero Tbk)	No. 11/438/DASP tanggal 3 Juli 2009	03-Jul-09
8.	PT Bank Nationalnobu	No. 15/148/DASP tanggal 26 Februari 2013	29-Apr-13
9.	PT Bank Permata	No. 15/26/DASP tanggal 11 Januari 2013	23-Jan-13
10.	PT Bank Rakyat Indonesia (Persero) Tbk	No. 12/691/DASP tanggal 13 Agustus 2010	29-Dec-10
11.	PT Finnet Indonesia	No. 14/277/DASP tanggal 16 April 2012	01-Jun-12
12.	PT Indosat, Tbk	No. 11/434/DASP tanggal 3 Juli 2009	03-Jul-09
13.	PT Nusa Satu Inti Artha	No. 14/898/DASP tanggal 20 Desember 2012	25-Mar-13
14.	PT Skye Sab Indonesia	No. 11/431/DASP tanggal 3 Juli 2009	03-Jul-09
15.	PT Telekomunikasi Indonesia, Tbk	No. 11/432/DASP tanggal 3 Juli 2009	03-Jul-09
16.	PT Telekomunikasi Selular	No. 11/513/DASP tanggal 3 Juli 2009	03-Jul-09
17.	PT XL Axiata, Tbk	No. 12/816/DASP tanggal 6 Oktober 2010	29-Mar-11
18.	PT Smartfren Telecom Tbk	No. 16/85/DKSP tanggal 26 Mei 2014	16-Jun-14
19.	PT Dompot Anak Bangsa (d/h PT MV Commerce Indonesia)	No. 16/98/DKSP tanggal 17 Juni 2014	29-Sep-14
20.	PT Witami Tunai Mandiri	No. 16/129/DKSP tanggal 18 Juli 2014	05-Jan-15
21.	PT Espay Debit Indonesia Koe	No. 18/262/DKSP/Srt/B tanggal 29 Februari 2016	20-Jul-16
22.	PT Bank QNB Indonesia Tbk	No. 19/129/DKSP/Srt/B tanggal 13 Februari 2017	01-Mar-17
23.	PT BPD Sumsel Babel	No. 19/250/DKSP/Srt/B tanggal 13 Maret 2017	04-Apr-17
24.	PT Buana Media Teknologi	No. 19/468/DKSP/Srt/B tanggal 23 Mei 2017	29-Mei-17
25.	PT Bimasakti Multi Sinergi	No. 19/467/DKSP/Srt/B tanggal 23 Mei 2017	14-Jun-17
26.	PT Visionet Internasional	No. 19/661/DKSP/Srt/B tanggal 7 Agustus 2017	22-Agust-17
27.	PT Inti Dunia Sukses	No. 19/672/DKSP/Srt/B tanggal 10 Agustus 2017	10-Okt-17
28.	PT Veritra Sentosa Internasional	No. 20/207/DKSP/Srt/B tanggal 22 Mei 2018	01-Jun-18

Source: Bank Indonesia (2018)

The e-money that has been launched by the companies listed above are used by many Indonesian people as e-money are considered to be practical and flexible. Moreover, the government of Indonesia also supported the usage of e-money and this can be proven by the released of Non-Cash National Movement (Gerakan National Non Tunai or GNNT) on 14 August 2014 in Indonesia. The GNNT itself is aimed to increase the awareness of Indonesian people towards the use of the non-cash instruments to create less cash society. Due to this, the transaction of e-money in Indonesia increases through out the years. This can be seen from Table 1.2 on which in average, the volume and nominal of e-money transactions in indonesia increases even though it undergoes some declines in August 2017, February 2018, and April 2018. In May 2018, the volume and nominal of e-money transactions in Indonesia reached its peak with amount of 222.927.509 transactions and nominal amount Rp. 3.534.569.000.000.

**Table 1.2**  
**E-money Transactions in Indonesia on Mid-2017 and Mid-2018**

Periode	Volume (in transaction units)	Nominal (in million rupiah)
<b>Juni 2017</b>	51.969.836	1.019.650
<b>Juli 2017</b>	68.685.872	1.141.504
<b>Agustus 2017</b>	62.565.183	790.699
<b>September 2017</b>	67.553.272	817.366
<b>Oktober 2017</b>	104.478.745	1.264.462
<b>November 2017</b>	128.518.604	1.647.358
<b>Desember 2017</b>	163.301.280	1.957.290
<b>Januari 2018</b>	215.446.513	3.491.803
<b>Februari 2018</b>	187.132.482	3.360.791
<b>Maret 2018</b>	209.336.882	3.458.627
<b>April 2018</b>	204.108.890	3.352.894
<b>Mei 2018</b>	222.927.509	3.534.569

Source: Bank Indonesia (2018)

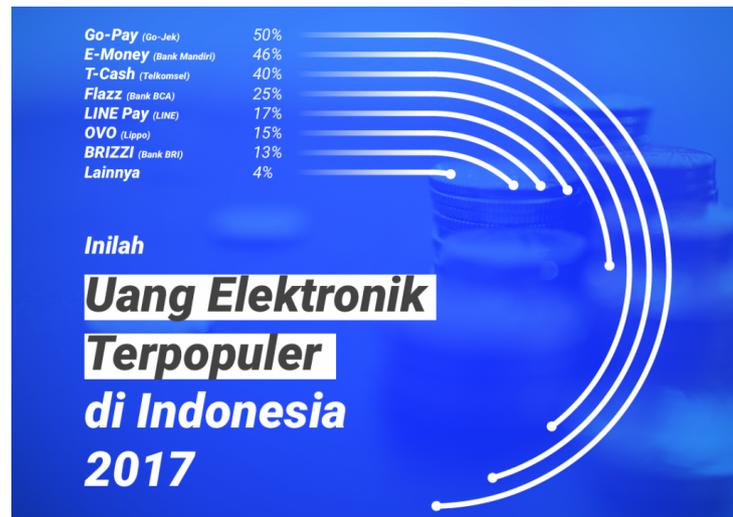
One of the most famous e-money in Indonesia that is used among the Indonesian people is T-Cash. T-Cash was released by PT Telekomunikasi Seluler (Telkomsel) on November 2007 and its effective operational date is on 3 July 2009 (table 1.1). Basically, T-Cash uses smartphone as a payment gateway through the T-Cash application known as T-Wallet. T-Cash can be used by both

Telkomsel and non-Telkomsel users. T-Cash offers many advantages to the users, on which users can top-up their T-Cash balance at Grapari, ATM Bersama and Indomaret. Aside from that, T-Cash balance can also be withdrawn in Indomaret and it can be transfer to other T-Cash account or to ATM Bersama. In addition, T-Cash can be used to pay up for several bills including kartu halo, cable tv, internet, telephone, water bills, electricity bills and online shopping bills. T-Cash can also be use to pay for transport and travel which includes train tickets, plane tickets and hotel. Moreover, T-Cash can be use to pay for concert tickets, airtime and data top-up. Not only that, T-Cash also have the tap to pay and scan QR code features and it also offers many promos to the users.

Due to all the advantages being offered by T-Cash to the users, T-Cash had succeeded in gaining 20 million users in 2018. Among the 20 million users, T-Cash is famous for the features of airtime top-up, paying or buying anything through smartphone and paying merchants. Unfortunately, Danu Wicaksana as the CEO of T-Cash stated that only around 25% up to 35% of T-Cash total users are categorized as active users. Active users are users who did active transactions so, if the users only open and did browsing on the application of T-Cash, those users are not categorized as active users. This issue is surely a problem for T-Cash because the amount of its active users are too low compared to its total users. Therefore, further research is needed to be conducted to find out the reasons behind the low percentage of T-Cash active users.

This research should discuss about all the variables that influence the application continuance intention of T-Cash. The application continuance intention is very important for T-Cash because in this current situation, the users of T-Cash have a low application continuance intention on which they do not intend to keep on using the application for a long period of time. This was refer to the statement of T-Cash's CEO that has been mentioned previously. In addition, the application continuance intention is also very important for T-Cash because now days there are a lot of competitors. In 2017, it was reported that Go-Pay and E-Money are more popular than T-Cash (picture 1.1). Go-Pay can be use for Go-Ride, Go-Car, Go-Food, Go-Send, Go-Box, Go-Tix, Go-Med, Go-Pulsa, Go-Bills,

Go-Massage, Go-Clean, Go-Glam and Go-Auto payment. Meanwhile, E-Money can be use for TOL payment, parking payment, train payment, transjakarta payment, transjogja payment, batik solo trans payment, SPBU Pertamina payment, payment at stores, amusement park and restaurants.



Picture 1.1. The Most Popular E-Money in Indonesia in 2017  
Source: Teknologi.id (2018)

The application continuance intention refers to the tendency of people to use service in the post-acceptance stage (Hu *et al.*, 2009). Therefore, the higher the application continuance intention means that, the application that was used by the users is a well-developed application. There are several related variables that were chosen to be very important in influencing the application continuance intention. These variables include satisfaction, post-usage usefulness, and self-efficacy. Satisfaction is considered as an important factor for the application to continue because if the users are satisfied so they will continue to use the application in a long time. The satisfaction itself can be defined as someone's affective condition that is the result from their evaluations on all aspects that construct consumer relationship (Flavian *et al.*, 2006). Besides that, self-efficacy is also chosen as a variable because it illustrates someone's effort and diligence to face certain challenge. In this case it is the usage of the application so if the users feel that they are capable in using the application; they will choose to keep on using the application in the long run. According to Igbaria and Livari (1995, 588), self-

efficacy is an individual's belief to be able to do certain action and it is highly correlated to its performance in computer and technological acceptance. Lastly, post-usage usefulness is also chosen as a variable because it illustrates the level and the perception that the usage of the application could improve the user's efficiency and productivity (Rezaei *et al.*, 2016). Therefore, if users feel that they can be more efficient and productive by using the application, they will continue to use the application for a long time.

T-Cash needs to understand about the application continuance intention because its active users are only around 25% up to 35% of the total 20 million users. To illustrate the application continuance intention itself, this research uses variables which are related like post-usage usefulness, self-efficacy and satisfaction. The basis theory for all of the connections among the variables is the theory of extended model of information technology continuance by Bhattacharjee *et al.* (2008). This theory was first originated from the expectation disconfirmation theory (EDT) (Oliver 1980) and post-acceptance theory of IS continuance (Bhattacharjee 2001b). Basically, the theory of extended model of information technology continuance will be used as the base of this research because this theory involves the cognitive influence that can be felt by the users of the application itself.

Based on the phenomena and theory shown above, this research will be titled:

**“The influence of post-usage usefulness, self-efficacy and satisfaction towards the application continuance intention of T-Cash”**

## **1.2 Research Questions**

Based on the background shown above, the following research question can be purposed:

1. Does Post-Usage Usefulness affect the Application Continuance Intention in T-Cash?
2. Does Post-Usage Usefulness affect Satisfaction in T-Cash?
3. Does Self-Efficacy affect the Application Continuance Intention in T-Cash?

4. Does Self-Efficacy affect Satisfaction in T-Cash?
5. Does Satisfaction affect the Application Continuance Intention in T-Cash?

### **1.3 Research Objectives**

Based on the research questions, the following objectives could be concluded:

1. To know and analyze the affect of Post-Usage Usefulness towards the Application Continuance Intention in T-Cash.
2. To know and analyze the affect of Post-Usage Usefulness towards Satisfaction in T-Cash.
3. To know and analyze the affect of Self-Efficacy towards the Application Continuance Intention in T-Cash.
4. To know and analyze the affect of Self-Efficacy towards Satisfaction in T-Cash.
5. To know and analyze the affect of Satisfaction towards the Application Continuance Intention in T-Cash.

### **1.4 Benefits of the Research**

This research is expected to provide significant benefits within theoretical and practical significance.

#### **1. Academic Benefits**

The result of this research can be used as a reference for those people who do similar research study or continual study related to post-usage usefulness, self-efficacy, satisfaction and application continuance intention.

#### **2. Practical Benefits**

The result of this research can help the T-Cash side to have a deeper understanding about the importance of post-usage usefulness, self-efficacy, satisfaction and application continuance intention. Besides that, the T-Cash side can also be informed about the relationships between these

variables and this can be an input for them to do their strategic planning for the future.

### **1.5 The Writing Systematics**

The writing systematics of this research is divided into five chapters, which are arranged systematically as below:

#### **CHAPTER 1: INTRODUCTION**

This chapter includes research background, research questions, research objectives, benefits of the research and the writing systematics.

#### **CHAPTER 2: LITERATURE REVIEW**

This chapter includes the theoretical foundation of post-usage usefulness, self-efficacy, satisfaction and application continuance intention, previous research, hypotheses development and research framework.

#### **CHAPTER 3: RESEARCH METHODOLOGY**

This chapter includes research design, variable identification, operational definition of variables, variable measurement, type and source of data, tool and data collection method, population, sample and sampling technique, and also data analysis technique.

#### **CHAPTER 4: ANALYSIS AND DISCUSSION**

This chapter includes general descriptions of the research object, data description, data analysis results by using SEM LISREL, and discussions on the research discovery.

#### **CHAPTER 5: CONCLUSION, LIMITATION AND SUGGESTIONS**

This chapter includes the conclusion of the results, the limitation and the suggestions that might be useful for future research and also for T-Cash.