

CHAPTER I

INTRODUCTION

This chapter will explain briefly and thoroughly about the background of the research, formulation of the problems, research objectives, research questions, research limitations, research contributions, and research outline.

1.1 Research Background

Rapid technological developments have led to the digitalization in many sectors, one of which is the payment system (Cascio & Montealegre, 2016). Humans who originally paid in cash eventually switched to non-cash transactions. At first, non-cash transactions are in the form of debit cards, credit cards or checks (Goczek & Witkowski, 2015). Nowadays, cellular telephone ownership has expanded among the public, although most people do not have bank accounts, it is opening up opportunities for mobile payment (m-payment) (Untoro, Trenggana, & Dewi, 2013). This happened because of the development of a new technology called "FinTech" or financial technology that provides an efficient payment, convenient, and uses sophisticated platforms such as mobile payment (Leng, Talib, & Gunardi, 2018). The emergence of mobile commerce, where consumers can make purchases and data entry through mobile devices, also brings m-payment to global attention (Chen, 2008). Moreover, with the birth of e-commerce, trading can be done digitally and payments are made through m-payments that appear to help consumers trade comfortably and confidently in virtual markets (Chen, 2008).

Globally, the FinTech industry has grown, developed, and begun to be recognized by the global consumers. A survey conducted by Ernst & Young (EY), “Global FinTech Adoption Index 2019” showed that the adoption of global financial technology services has increased significantly, from 16% in 2015, to 33% in 2017, and to 64% in 2019. From that percentage of global financial technology adoption, FinTech awareness is very high as indicated by 96% of global consumers understanding at least one alternative FinTech service for money transfers and make payments (“Global FinTech Adoption Index 2019,” 2019).

Some mobile payments have been widely known by the world, replacing traditional payment methods and have even increased the volume of global transactions. PayPal is the pioneer of mobile payment in the world that was founded in 1998 (Gupta, 2012). In Asian countries, PayPal in 2018 is the most used mobile payment in the Philippines (63.7%), Thailand (58.4%), and the third most used in Indonesia (33.3%) (“Mobile payment in Asia: Insights on Consumer Preferences,” 2019). Nowadays, mobile payments such as Apple Pay, Google Wallet, Alipay, WeChat pay, and Boost are becoming increasingly popular around the world and are slowly replacing traditional payment methods (Phoong, Phoong, Moghavvemi, & Yeong, 2019). Based on Capgemini Research Institute’s report “World Payments Report 2019”, non-cash transactions volumes grew at 12% during 2016 until 2017 to reach 539 billion globally which means this will continue to increase in the coming year and inevitably everyone from various generations must learn how to use it.

In various countries, Generation X (Gen X) is a segment that has great potential and benefits if they use m- payment. Generation X is defined as those born from 1965 to 1981 (Chapman, 2010, p. 212). This first generation to come of age with PCs and the internet are entirely comfortable using both traditional and digital media channels (McKay, Pearson, Peart, Utreras, & Wang, 2011). Moreover, they are an important consumer segment because they are at the peak of their income and spending potential (McKay *et al.*, 2011).

In the United States, the current population of Generation X is quite large and still for the next few years, but the mobile payment usage is low. Based on *International Data Base from United States Census Bureau*, the percentage of Generation X population in 2019 is around 21.85% which is ranked second after millennial (31.35%). As shown in *figure 1.1*, the number of their population will still large for the next 30 years. Related to their income, when they are at the same age, Generation X can generate more income than the millennial generation (Bialik & Fry, 2019). A research conducted by The Pew Charitable Trusts “Who Uses Mobile Payments?” indicated that although 83% of Generation X in United States has smartphones, only 33% use mobile payments either to make purchases, pay bills, or send and receive money. They often use mobile payment to earn rewards, appreciate the convenience of being able to pay quickly and receive an electronic receipt (Hackenbracht, King, Scott, Siegel, & Weinstock, 2016).

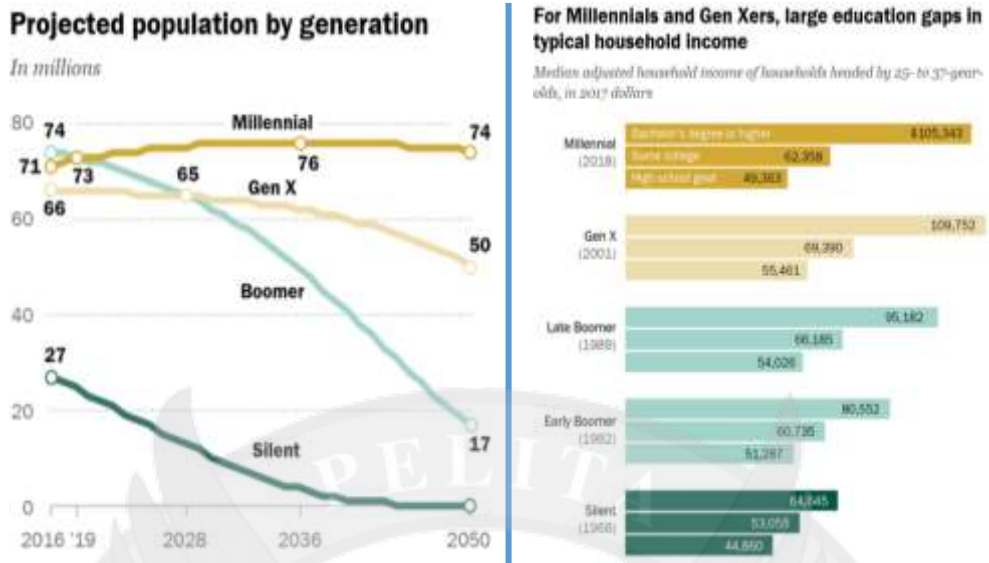


Figure 1.1 Projected population by generation and household income by generation
Source: Pew Research Center (www.pewsocialtrends.org)

Besides in United States, the mobile payment market also continuously growing rapidly in the Asia-Pacific region. According to GMO Research, mobile internet penetration rose in Asia-Pacific from 47.1% in 2014 to 57.2% in 2018, and it is considered to be the fastest-growing market for mobile payment worldwide, with compound annual growth of 35.2%. In the ASEAN region, mobile payment transactions are forecast to reach \$30 billion by 2021 because of traditionally cash-reliant societies begin to move towards non-physical e-payment options (“Mobile payment in Asia: Will Cash Finally Be Dethroned?,” 2019).

Entering China, Generation X of this country also tends not to use m-payment when making payments. Chinese consumers still prefer shopping at physical stores rather than online because according to an EY China survey “*Precision marketing: Improve customer experience across generations*”, 43% of respondents said they would only buy things if they saw it directly. This phenomenon has nothing to do

with age so it can be concluded that in general, Generation X also still prefers shopping at physical stores. To shop at a physical store, the survey showed that debit cards are still the main option but one in four consumers prefer to use online channels (sending money through banks, websites, mobile payments). However, the main proponent of online payments is generation Z even though the population of Generation X evidently is greater than generation Z in China which is 27.4% for Generation X and 17.5% for generation Z in 2019 (International Data Base from United States Census Bureau).

Same with other countries, Generation X in South Korea also rarely use m-payment although their population is just slightly smaller than the millennial. According to a report by Korea Institute of Industrial Economics & Trade, South Korea entered the FinTech market as a newcomer in April 2015. Despite being late, the mobile payment services market in Korea is growing rapidly and is called the "Era of Peace" due to active interest in the mobile payment market and high public interest in simple payment authentication (Eunbi, 2018). Based on the report *"Survey of Usage and Implications for the Use of Financial Services 2017"* published by the Bank of Korea, the highest use of mobile payments is in the 20s with 53.6%, and 30s with 50.6%. However, usage rates decreased when the age group increased to 28.0% in the 40s, 8.5% in the 50s, and 2.1% above the 60s. The reason for the low level of use of m-payments among older peoples is the difficulty in new learning so they prefer cash (Eunbi, 2018). In South Korea, the population of Generation X is 27.6% while millennial generation is only slightly higher at 29.2% in 2019 (International Data Base from United States Census Bureau).

Another case in India, Generation X is precisely starting to catch up with the millennium in online transactions (Kumar, 2017). He stated that even though millennials are the largest age group in India a few years ago, their size will begin to diminish from 2019. Based on Nielsen India, trends in digital adoption and use reveals that Generation X consumers are significantly increasing their taste for technology even though they have been slower to adopt technology, as a result of inertia, inhibition and caution. Demonetization has accelerated the adoption of online transactions among Generation X (Kumar, 2017). This proves that there is an opportunity to expand the use of m-payments to Generation X in India.

On the other hand, m-payment in Indonesia was first launched in 2007 and growing rapidly over time. Telkomsel T-Cash first launched in 2007, followed by Indosat Dompotku in 2008 and XL Tunai in 2012. Based on research conducted by MDI Ventures & Mandiri Securities, the volume of m-payment transactions in Indonesia amounted to US \$ 16.4 billion in 2019. That number is equivalent to 2% of Indonesia's GDP (Agusta & Hutabarat, 2018). This shows that the m-payment trend is developing rapidly in Indonesia and most people are starting to use it.

The same pattern regarding the use of m-payment in Generation X can also be seen in Indonesia. Based on *Survei Sosial Ekonomi Nasional* (Susenas) conducted by *Badan Pusat Statistik* (BPS) in 2017, Generation X population in Indonesia ranks third at 25.74% and the majority of the population is still held by millennials at 33.75%. In 2019, the Generation X population still ranks third based on the International Data Base from United States Bureau. However, GMO Research “Mobile Payment in Asia: Will Cash Finally be Dethroned?” stated that

the use of m-payment by Generation X (37.8%) is less than millennial generation (51.3%) even though the population size is only slightly different.

When talking about their income, the average millennial generation income in Indonesia is lower than the average Generation X income and this can be utilized by m-payment companies (Badan Pusat Statistik, 2018). People at higher income level tend to spend more as their consumption and need for luxuries increases with improvement in income (Ahmed & Khan, 2016). The income level affects what consumers can afford and the perspective towards money (Lautiainen, 2015). By looking at this patency, companies can utilize the gap from Generation X buying power and population to increase their profit and market share. As shown in *figure 1.2*, Indonesia has the lowest proportion of regular users at 40.5% which makes it the market with the highest potential for m-payment companies. Indonesia is more open to new players and consider to be the fastest-growing market for m-payment in the world, as the population is rapidly adopting new technologies, particularly in urban areas (“Mobile payment in Asia: Will Cash Finally Be Dethroned?,” 2019).

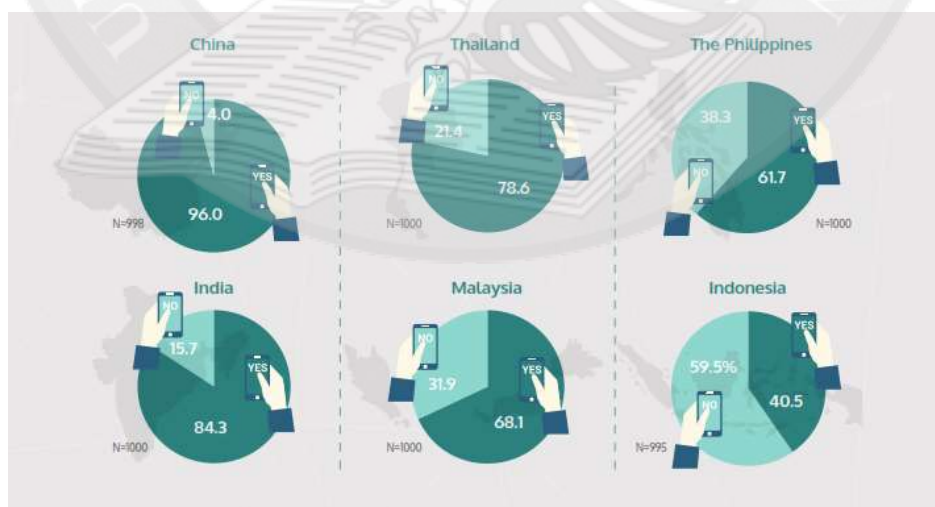


Figure 1.2 Mobile Payment Penetration with cross-country comparison (in %)

Source: GMO Research

Several studies have shown that there are several reasons why people would or would not adopt m-payment. A study in Malaysia conducted by Mun, Khalid & Nadarajah (2018) indicated that people are concerned about the spread of their personal information and the possibility of transaction fraud when using m-payment. Also, people around them do not use m-payment, they do not even recommend it. Regarding its ease of use, it is difficult to learn how to use m-payment. The result from their study appointed that people seems to be willing to use mobile payment services if they find out that using it has more advantage than using the current payment methods (Mun, Khalid, & Nadarajah, 2018).

Based on our pilot study of 23 Generation X in Jakarta, 17.5% of them do not use payments because mobile payments are considered complicated, limited internet networks, do not understand how to use them, and technology illiterate. From these results, Generation X actually will suffer losses if they do not use m-payment because based on the observation held in the last week of September 2019, many mobile payment providers give promotion and cashback which can be a benefit for the customers. GoPay offered a GoPay Payday 1st birthday promo where there is a 50% cashback in hundreds of GoPay business partners. OVO also offered 60% cashback with a maximum 30,000 OVO Points. Besides of that, these two mobile payment providers have a daily cashback from 10% to 30%.

According to the discussion in the background and pilot study, mobile payment is very popular in this era and the majority of mobile payment users are millennials. However, the data in the world, Asia, and Indonesia stated that the number of Generation X that use mobile payment is less than the millennial

generation. In fact, the population of the X generation is only slightly smaller than the millennial generation. Also, they only use mobile payment for fewer functions, even though they can still use them for other purposes. In addition, Generation X income has proven to be greater than the millennial generation.

As described above, there is a similar pattern of problems in various countries regarding the use of m-payment in Generation X. We conclude that this problem does not only occur in a few countries, but almost all countries around the world experience this problem. Besides, the use of m-payments by Generation X can still be increased again in many countries and ultimately can increase the profits of m-payment companies, especially if they able to expand across countries like PayPal or WeChat Pay. To increase the use of m-payments in Generation X, we must know what factors make them want to use it and what concerns they have about it. In order to stay competitive, m-payment services providers are required to identified the the needs of the Generation X and create a mobile payment system which is able to fulfil the consumers' needs (Mun *et al.*, 2018). Therefore, this study wants to examine what factors affecting intention to use mobile payment on Generation X where the focus is on self-efficacy, personal innovativeness, subjective norm, perceived ease of use, perceived usefulness, and trust.

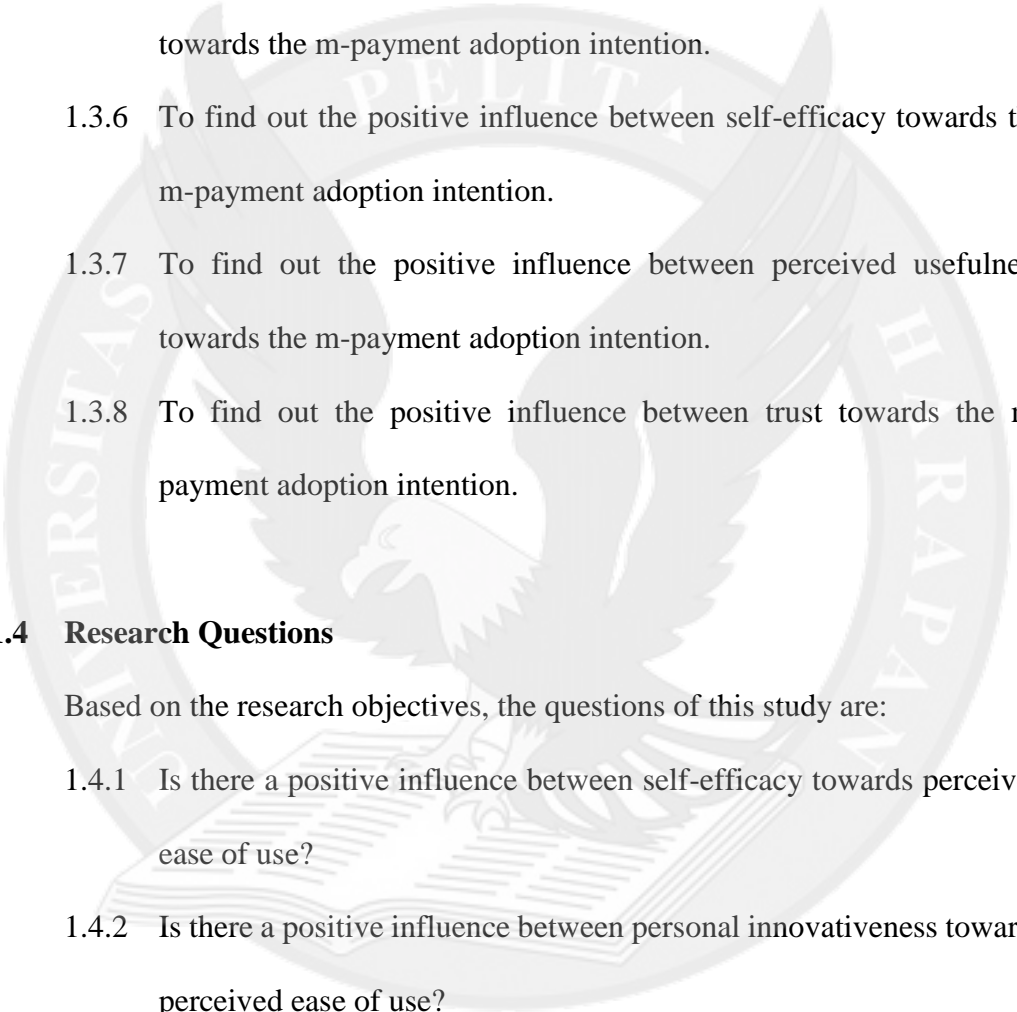
1.2 Research Problem

Based on the issues discussed in the background, the researchers found that the population of Generation X that uses mobile payment is less than the millennial generation in many countries around the world. Meanwhile, the fact asserted that the population of Generation X in several countries is only slightly smaller and their incomes are far greater than millennials (Badan Pusat Statistik, 2018; Hackenbracht *et al.*, 2016; Walters *et al.*, 2017). Despite a study indicated that people at higher income level tend to spend more as their consumption and need for luxuries increases with improvement in income, where it can be concluded that Generation X buying power is higher than other generations (Ahmed & Khan, 2016). If they do not use m-payment, they will also lose many benefits from it. Then the gap between mobile payment users in Generation X can be utilized by mobile payment companies to generate greater profits for the next few years. Therefore, this study wants to examine what factors affecting intention to use mobile payment on Generation X so we can find out what factors make them want to use m-payment.

1.3 Research Objectives

Based on the research problems stated above, the objective of this research is formulated as follow:

- 1.3.1 To find out the positive influence between self-efficacy towards perceived ease of use.
- 1.3.2 To find out the positive influence between personal innovativeness towards perceived ease of use.

- 
- 1.3.3 To find out the positive influence between personal innovativeness towards perceived usefulness.
- 1.3.4 To find out the positive influence between subjective norm towards perceived usefulness.
- 1.3.5 To find out the positive influence between perceived ease of use towards the m-payment adoption intention.
- 1.3.6 To find out the positive influence between self-efficacy towards the m-payment adoption intention.
- 1.3.7 To find out the positive influence between perceived usefulness towards the m-payment adoption intention.
- 1.3.8 To find out the positive influence between trust towards the m-payment adoption intention.

1.4 Research Questions

Based on the research objectives, the questions of this study are:

- 1.4.1 Is there a positive influence between self-efficacy towards perceived ease of use?
- 1.4.2 Is there a positive influence between personal innovativeness towards perceived ease of use?
- 1.4.3 Is there a positive influence between personal innovativeness towards perceived usefulness?
- 1.4.4 Is there a positive influence between subjective norm towards perceived usefulness?

- 1.4.5 Is there a positive influence between perceived ease of use towards the m-payment adoption intention?
- 1.4.6 Is there a positive influence between self-efficacy towards the m-payment adoption intention?
- 1.4.7 Is there a positive influence between perceived usefulness towards the m-payment adoption intention?
- 1.4.8 Is there a positive influence between trust towards the m-payment adoption intention?

1.5 Research Limitations

The limitations of this research can be seen from the sample used, which is Generation X while researchers are millennial generation so there are difficulties in getting samples. Researchers must use a third connection from parents and lecturers to get samples and go straight to the field. This is the first time researchers are conducting research so the researchers have difficulty in finding references and have to do a lot of consultation with the supervisor. In addition, this research was only conducted in Jakarta and Tangerang hence the samples taken are based on demographics and the current situation in Jakarta and Tangerang. This research could be different if done in different places or demographics.

1.6 Research Contributions

1.6.1 For Researchers

First, this study may help the researchers to understand that each generation has a different ability to absorb technology. And as a millennial generation researchers must be more aware to learn technology especially mobile payment. Second, the results of the study may improve information about the advantages and disadvantages of mobile payments among Generation X.

1.6.2 For Business School

In the era with high rapid growth of technology, this study may raise awareness in schools to develop technology especially the application of mobile payments. This study will increase knowledge, skills and attitudes about mobile payment that may support the school management.

1.6.3 For Mobile Payment Company in Indonesia

This study will provide information that will help the mobile payment company to find out what factors make them want to use mobile payment and the difficulties faced by Generation X in using mobile payment so that it can improve the quality of mobile payment applications and widen its market share to Generation X.

1.6.4 For Other Company

The results of this study are expected to be used by company in Indonesia and global company that will use technology as a tool of communication with consumers. Company will be able to understand more

about the experiences felt by Generation X customers and the problems they face while using mobile payment so that they can implement it on their technology.

1.6.5 For Further Researcher

With this research, it is expected that further researchers can conduct research with samples of different generations or across generations. In addition, this research can also be used as a source of information about the use of mobile payment in Generation X.

1.7 Research Outline

This research study contains 5 chapters:

CHAPTER 1 : INTRODUCTION

This chapter will explain briefly and thoroughly about the background of the research, formulation of the problems, research objectives, research questions, research limitations, research contributions, and research outline.

CHAPTER 2 : LITERATURE REVIEW

This chapter will describe about the previous research, the theoretical basis for the research, definition of each research variable, the relationship between the variables, research model, and research hypothesis.

CHAPTER 3 : RESEARCH METHOD

This chapter will explain about research object, research paradigm, types of research, data collection strategies, extent of researcher interference, study setting, unit of analysis, time horizon, variable measures, data collection ethics, data collection method, sampling design and sample size, measurement, and lastly, data analysis.

CHAPTER 4 : RESULTS AND DISCUSSION

This chapter will describe about the profile of the respondents of this study, the explanation of pre-test study and actual study result, hypothesis test, and the discussion of the results.

CHAPTER 5 : CONCLUSIONS AND RECOMMENDATIONS

This chapter will discuss about the conclusions of the research, the managerial implications for this research, the limitations of the research, and recommendations for future research.