#### **CHAPTER I**

## **INTRODUCTION**

### 1.1 Background of The Research

The internet is a search tool that is widely used, providing the public with access to global information and communication. The internet also called net is a collection of networks all over the world that connect millions of companies, government agencies, educational institutions, and individuals. Every network on the internet provides resources that increase the amount of information that can be accessed via the internet. The internet can be any time, from computers or smartphones, home, work, schools, restaurants, even in a park. At present, more than one billion individual users or companies around the world access various internet services. Worldwide Web (WWW) and e-mail are two of the most widely used internet services. Other services include chat, instant messaging, and webcam. Although the terms Internet and Web are often used interchangeably, they are actually two very different things. The Internet is a worldwide network of computer networks, and the Web is one of the Internet's most popular services, providing access to billions of web pages. An app (short-hand for application) is a software application. The term is typically used when referring to mobile applications, although it is also sometimes used to refer to desktop computer applications as well.

The Internet of Things (IoT) is a technology that is being talked about lately. With this technology, every item you have can be connected to the internet, so that it can be controlled remotely with a smartphone or even with voice commands. In 2017, it is estimated that there will be 1.5 million new devices connected to the internet. The number is even said to be increased to reach twenty billion devices by 2020. The internet network is actually not designed to be able to service twenty billion devices from the start. But with the rapid development of the Internet of Things, they can't help but handle all these devices (Pratama, 2017).

E-commerce involves the use of the Internet, the World Wide Web (Web), and mobile apps and browsers running on mobile devices to transact business. More formally, e-commerce can be defined as digitally enabled commercial transactions between and among organizations and individuals. Each of these components of our working definition of e-commerce is important. Digitally enabled transactions include all transactions mediated by digital technology. For the most part, this means transactions that occur over the Internet, the Web, and/or via mobile devices. Commercial transactions involve the exchange of value (e.g., money) across organizational or individual boundaries in return for products and services. Exchange of value is important for understanding the limits of e-commerce. Without an exchange of value, no commerce occurs (Laudon & Traver 2017). Electronic commerce is the process of buying and selling that occurs between business people and consumers without having to be in a physical store (Yasha, 2017). Buying and selling transactions that occur only take place through electronic media, which is more precisely online. The development of e-commerce is increasing rapidly over the years along with the existing digital developments. No exception in countries in southeast Asia. It can be seen from figure 1.1, E-commerce market from 2015 and projected to 2025 in the ASEAN market will be greatly increased from its initial less than 10 billion dollars up to 80 billion dollars. The highest e-commerce market is Indonesia, Indonesia is ranked as the first 40 billion dollars in the next 2025.



Figure 1.1 E-commerce market in Southeast Asian countries 2015-2025

Sources: https://databoks.katadata.co.id/

#### **1.1.1 Financial Technology**

In general, internet users are also applied to the banking industry. This can be seen from the development of fintech in the world which continues to increase, for example, there are five countries with the highest fintech transactions. In the first position is the United States with a transaction value of \$ 769.32 billion. Then there are China, Britain, Japan, and Germany. The research of the Employment of Foreign Manpower Act (EFMA) released by Statista this year

states that 45.5 percent of banks collaborate. There are also those who choose to invest. Some of the respondents said they were ready to compete with Fintech by increasing the capability of the company. As many as 17.8 percents instead acquired fintech start-ups. While four percent said they did nothing. The existence of fintech can be a threat to the banking business, but it can also be a partner. This depends on how the bank reacts to it (Sicca, 2018). Data from daily social fintech about Indonesia reveal that only 36 percent of adults in Indonesia have an account at a formal financial institution. The same data also stated that the amount of new loans was still 34.77 percent. Moreover, there are 49 million micro small medium enterprise (MSME) that are not yet eligible for bank credit. Meanwhile, there are many Indonesian people who access financial technology. So that the banking industry can reach its market potential, by offering fintech services. The ease of access offered by fintech comes from regulations that have not been too strict in regulating their movements, such as those experienced by banks. It does not only happen in Indonesia but also in the whole world. Tightening of the rules by the authorities can also mean a new fintech startup threaten to expand, but they contribute to the development of the financial industry (Sicca, 2018).

According to Muliaman D. Hadad as Chair of the Board of Commissioners of the Financial Services Authority (OJK), he stated that there are at least five FinTech advantages in Indonesia: (1) Encouraging equal distribution of the welfare level of the population; (2) Helping fulfill the huge domestic financing needs; (3) Encouraging national financing distribution is still not evenly distributed on 17,000 islands; (4) Increasing national financial inclusion; (5) Encouraging the ability to export MSMEs that are currently still low.

The enormous development and potential in the realm of FinTech homeland have made Bank Indonesia, one of the financial regulators in the country, established Fintech Office in November 2016. The BI Fintech Office was formed to issue rules aimed at encouraging the growth of new innovations, especially those related to technology and the financial sector. The use of Fintech was not spared from BI's supervision, so BI divided the benefits of FinTech into three categories which are a benefit for consumers, business people, and economy. Benefits for consumers consists of (1) Expansion of product choices; (2) Improved service quality; (3) Price reduction. Furthermore, the benefits for business people are: (1) Shorten the transaction chain; (2) Increase capital efficiency and operational resilience; (3) Improve financial illusion; (4) Streamlining information flow. Moreover, the benefits for the economy: (1) Speed up the transmission of monetary policy; (2) Increase the speed of money supply; (3) Increase economic growth.

Regarding of the role advantages of FinTech itself as described above. It is indeed very beneficial to use FinTech in today's digital age. Moreover, the millennial generation, when they were young, had become accustomed to technological matters, it is not impossible in the future they would better understand how to use digital money compared to conventional money (kliklegal.com, 2018).

### **1.1.2 Mobile Banking**

At present, the banking industry is trying to make it easier for customers to access transactions. One of them is the presence of Mobile Banking or M-Banking. Banking services through communication devices (mobile phones) are quite practical to use. As the name implies, this is truly mobile and can be used anywhere and anytime, as long as it is connected to the network operator. So, customers do not need to go to the ATM to make transactions. Mobile Banking is very well known because of the convenience provided to customers. Customers can access information about debit/credit, make payments account, check the amount of savings, transaction history, and so forth. Customers can also get mobile connectivity, even when in remote areas or when having problems with the internet network. Unlike the Online Banking service that requires a strong internet network. This service is also very easy to understand because it looks very easy. Customers only need to follow the instructions to make a transaction. In addition, this service can reduce the risk of fraud, because the customer will get a notification via SMS when there is activity on his account. The notification includes deposits, withdrawals, transfers between accounts, and so forth. The emergence of Mobile Banking is motivated by the desire of banks to gain full trust from their customers. One way is to use technology. At that time, a technology that was growing rapidly must be utilized carefully and precisely. Various kinds of technology provide new breakthroughs that can be used by banks to improve the quality of services to their customers. From this, banks throughout the world made a new innovation by launching Mobile Banking (Putriansyah, 2015).

### **1.2 Problem Statement**

1.2

Penetration of internet usage in Indonesia increases significantly every year. This can be shown in figure 1.2. In 2015 internet users were only 34.61%, from that number internet users projected to increased to 49.89% in 2022. The results of research by statista (2019) also show that many Indonesians access the internet regularly through their mobile devices. As of 2016, an estimated 26.5 percent of the population accessed the internet from their mobile phone. This figure is forecast to rise, almost 40 percent by 2021. Indonesia is a leader in the region in terms of mobile web usage. Indonesians spent, on average, 66 minutes on the internet via their smartphones on a daily basis excluding apps. It was found that smartphone users in Indonesia spent an average of 69 minutes every day on mobile apps. Only Filipinos have a higher daily average of mobile app usage in the region. The most popular Android app in Indonesia is BBM with a 90 percent reach, followed by Google Play and Google Search.



Internet user penetration in Indonesia from 2015 to 2022

Sources: https://www.statista.com/topics/2431/internet-usage-in-indonesia/

Figure

Furthermore head of Central Bureau of Statistics (BPS) Suryamin presupposed the internet as a basic need for the business world. "Internet is very important for businesses and the community, it is similar to our basic needs," said Suryamin in an event 'Latest Profile of Industrial Internet and Its Growth' in Jakarta. Outside of businesses, Suryamin explained, the internet may also help in educating the nation. What's more, a survey conducted with APJII has shown that 78.49% industry owners in Indonesia use the internet to search for news information. He hoped, in the future, there will be better internet services particularly for the business sector in order to increase the productivity of domestic business owners. In regards to digital buying, the Indonesian market shows optimistic projections. In 2021, e-commerce sales are set to surpass 14.47 billion U.S. dollars in revenues, up from 5.65 billion U.S. dollars in 2016. The number of digital buyers in the country, people that are expected to buy goods and services online, is projected to nearly double between 2015 and 2021 (apjii.or.id, 2017). Increasing financial transactions from business executives with the help of the trend of mobile devices continues to increase. 28% of small and medium class companies and 34% of corporations conduct financial transactions through mobile devices. This does not only occur in the financial sector (63%) but also carried out by company officials (54%) and even employees (8%) also conduct financial transactions through mobile applications. The increasing use of mobile devices for corporate banking transactions creates potential threats with a high risk. In the third quarter of 2015, Kaspersky Lab products for the mobile device has detected more than 300 thousand new malicious programs. Of these, the highest growth is owned by Trojan-Bankers designed to steal user credentials for internet banking and e-payment systems and credit or debit card data. The percentage of this type of malware increased from 0.6% (630 programs) in the second quarter to 1.5% (2,500 programs) in the third quarter. Such trends indicate that growth continued to increase for the use of mobile banking by companies and banking customers. Mobile banking is a service that allows bank customers to conduct banking transactions via cell phones or smartphones. Mobile banking services can be used by using the menus that are available through applications that can be downloaded and installed by customers. Mobile banking offers convenience when compared to SMS banking because customers do not need to remember the format of the SMS message that will be sent to the bank and also the destination number of the SMS banking (shinhan.co.id,2018). This trend will certainly continue to grow given the company and rollicking banking customers to switch to the comfort and convenience offered by mobile

banking, "said Ross Hogan, Global Head of Fraud Prevention at Kaspersky Lab. Ross said, with this increase in risk, banks would also need to increase their security, and take the initiative to prevent logging action. Protection is primarily intended to protect the confidential data of customers and maintain customer transactions (infobanknews.com,2015).

The development of the internet, especially fintech or online transactions is also experienced by the millennial generation. Millennials are those born in the years 1983 to 2001, in 1923, millennials are those born at a ratio of 1980 to 2000. Millennials are also referred to as generation Y (Budiati, 2018). This is because the millennial generation is the early adopters of new technology product and service and therefore is considered to be more likely to use the mobile banking in the future than others (Tan and Lau, 2016). The penetration of mobile banking in the millennial in Indonesia showed a higher penetration to reach 72 percent. According to Telstra's research, the high rate of penetration of mobile banking by millennials in Indonesia can be realized because of the role of financial institutions that develop products that are specifically intended to attract the millennial market. "There is no doubt that consumption of mobile digital products and services among millennials, as well as their purchasing power, has become a leading indicator of the performance of financial institutions," said Scopelliti. It is no secret that digitalization of services is now a homework that is quite crucial for the perpetrators of banking institutions in the country. With the dynamic shift in the age of consumers who are now increasingly dominated by millennials, banks now also need to strive for innovation to serve their customers, in addition to worrying about disrupting financial services that arise from various sides such as cryptocurrency and other fintech services (Maulana, 2017).

Therefore, there is a need to analyze factors which can influence the intention to adopt mobile banking, particularly among millennial in Indonesia Tan and Lau (2016), suggest that performance expectancy, effort expectancy, social influence, perceived risk are various factors that can influence the intention to adopt mobile banking, Tan and Lau also used the theory from UTAUT, like performance expectancy is defined as the extent an individual believes that his or her task performance would be improved through the usage of a particular system, effort expectancy refers to the extent of effort that the individual needs to exert in using the system. Perceived ease of use shared similar definition with effort expectancy, which is the degree of one person's belief that using a particular technology system would be free of effort, social influence defined as the degree of the perception of an individual on how important others think that he or she should use the system, and perceived risk is defined as the degree of uncertainty on the outcome of the use of innovation or the level of uncertainty on the security of the use of innovation Tan and Lau (2016). Accordingly, this study aims to analyze the influence of performance expectancy, effort expectancy, social influence, perceived risk on intention among millennial in Indonesia to adopt mobile banking.

## **1.3 Research Question**

- How is the performance expectancy of using mobile banking among millennial in Indonesia?
- 2. How is the effort expectancy of using mobile banking among millennial in Indonesia?
- 3. How is the social influence of using mobile banking among millennial in Indonesia?
- 4. How is the perceived risk of using mobile banking among millennial in Indonesia?
- 5. How is the intention of using mobile banking among millennial in Indonesia?
- 6. Does performance expectancy, effort expectancy, social influence and perceived risk partially influence the intention to adopt mobile banking on millennial in Indonesia?
- 7. Does performance expectancy, effort expectancy, social influence and perceived risk simultaneously influence the intention to adopt mobile banking on millennial in Indonesia?

### **1.4 Research Objective**

- To examine the performance expectancy of using mobile banking among in millennial in Indonesia.
- To examine the effort expectancy of using mobile banking among in millennial in Indonesia.
- To examine the social influence of using mobile banking among in millennial in Indonesia.

- 4. To examine the perceived risk of using mobile banking among in millennial in Indonesia.
- 5. To examine the intention of using mobile banking among in millennial in Indonesia.
- 6. To examine the influence of performance expectancy, effort expectancy, social influence and perceived risk on the intention to adopt mobile banking on millennial in Indonesia partially.
- 7. To examine the influence of performance expectancy, effort expectancy, social influence and perceived risk on the intention to adopt mobile banking on millennial in Indonesia simultaneously

## 1.5 Significant of Study

The problems discussed in this study are expected to benefit some parties:

1) For Researchers

this research is expected to provide new lessons or knowledge for the author in examining the problem with the study of the scope of *Performance Expectancy*, *Effort Expectancy*, *Social Influence*, and *Perceived Risk* which is the topic of research.

2) For Academics

this research is expected to add to previous research with new phenomena and also become a reference for further research. Include data collection, respondent characteristics, research results, and discussion of research results.

## **1.6 Research Writing Systematic**

The writing structure is arranged to provide a general overview and about research performed with the following structure are:

## **CHAPTER I INTRODUCTION**

This chapter contains a review of the object of the research, research background, research question, research objective, research significance, and research outline.

# CHAPTER II LITERATURE REVIEW

This chapter describes the theories that will support this research. This part also contained the Research Framework of this paper.

# CHAPTER III RESEARCH METHODOLOGY

In this chapter, the subject matters are Research Methods, approaches, and analysis techniques to explain and answer the problem.

# CHAPTER IV ANALYSIS AND RESULT

This chapter contains discussion and explanation regarding this research based on the analysis that done in this project and elaborates the theories that already stated in Chapter II.

# CHAPTER V CONCLUSION AND RECOMMENDATION

Consists of the restatement of the problem, brief description and procedure, principal findings and conclusions, and recommendations for further research.