CHAPTER 1
INTRODUCTION

1.1 Research Background

In the past few years, many people have been used to the service of e-commerce to help their daily activities needs, it is because the digital platform has been appropriately connected between each other. Many digital companies have partnered up with logistic companies or fintech companies to help the user be easier to adapt for their users (Febransyah & Goni, 2020). People around the globe are now spending more money in the e-commerce company, according to datareportal.com the data showed that the average spending of global e-commerce users has grown to almost US$500 on consumer goods every year (Kemp, 2020).

During the pandemic, e-commerce has helped many people to fulfil their daily needs through the various services that e-commerce had to offer to their users (Purbasari, Sari, & Muttaqin, 2020). One way to reduce the spread is applicating the social distancing practice, where many industries face the disadvantages of social distancing practices. Therefore the pandemic is demanding structural changes; for example, many financial companies in Singapore start to offer digital banking in Singapore and other ASEAN countries as a form of structural changes due to the pandemic (Lu, 2020). Therefore many people start to adapt these changes for their daily lives.

In the early stage of covid-19 era, Indonesian government implied social distancing practice to slow down the spreads of the virus inside the country, during social distancing practice, many people start to stayed at home, and start to developing a new habit since most people could not physically interact with each other, hence many people start surfing in e-commerce platforms, which making it a spike in e-commerce transaction, it was recorded per 31 March 2020, there are 670,755 e-commerce transaction occurs in Indonesia (Dirgantari et. al., 2020)

With the high number of transactions that occur, and the rising trends of e-commerce in Indonesia, the buying decisions of e-commerce users in Indonesia is still considered low, it is
because there is a lack of knowledge between the seller and consumers, it is because both parties did not meet directly at the same time (Juliana et. al., 2020). The e-commerce users need to gain more information about the products individually, which could lead the users not to gain available information.

Compared to e-commerce platform, retail industries are facing difficulties during these pandemic times, on top of that on 04 July 2021, Indonesian government decide to restrict physical activities across Java-Bali, the restriction is expected would hinder the recovery of retail industries in Indonesia, for example, one of Indonesian retail store HERO, is experiencing year-on-year revenue decline as much as 16% in 1Q2021, the revenue decline might increase due to the closure of the store operation time, (Kurniawan & Prayodi, 2021).

In the early days of COVID-19 pandemic, Generation placed 2nd as the most e-commerce users in Indonesia. According to table 1.1 it shows that Millennial placed number one as the generation that preferred to use e-commerce in terms of doing shopping activities.

The percentages are come from the total of internet users on each generations, for Gen-Z the total internet user is 44 million and Millennial is 46.7 million, while Gen-X is about 21
millions, Baby Boomers 4.5 million and the last one which are Silent Generation 124 thousand of internet users.

Knowing that e-commerce has a competitive advantage against retail industries during a pandemic, many generations from baby boomers until Generation-Z start to use e-commerce to fulfill their daily needs. A recent report conducted by Facebook IQ, the social network’s insight unit, they found that during the spreads of Covid-19 pandemic there are around 43 percent Gen X had begun shopping online, Generation-X start to compete with Millennial and Gen-Z during in terms of transaction (Pitoko, 2022).

The Generation-X who grew up during 1970 to 1980 experienced the adoption of information and technological revolution. At that time technologies such as cable TV, Personal Computer and Internet were still not common to use and only certain people could use the new technologies at that time (Yoga & Triami, 2020). Many people assume that Gen-Z is a generation that technology-savvy knowing that they are born in the era of information, while the fact that Generation-X is also tech-savvy knowing that Gen-X witnessed the digital transformation and become the early adopter of the digital technology era (Ha, 2018).

Knowing that Covid-19 spread across the globe, e-commerce services have provided an alternative way of doing shopping activities during the social restriction era imposed by the government, therefore e-commerce platforms in Indonesia provide many strategies in order to gain more users during the pandemic. Moreover the Generation-Z and Millennials is a generation who are common to use e-commerce services (Lestari 2019). Therefore, e-commerce companies needs to pay attention to Gen-X in order for them to start to adopt e-commerce during pandemic.

(ADD MORE DETAIL ON THE INCREASE OF GEN X USE AND OVERALL E-COMMERCE USE)
This quantitative research aims to fill the literature gap by exploring the factors that influence Gen-X to choose e-commerce service compared to traditional stores during COVID-19 pandemic. Therefore the title of this research is: **Assessing Factors That Influence Generation X to Adopt E-commerce During Pandemic**

1.1.1 E-commerce Global Perspective

Back in the 1960s, there was already business transaction activity through computer networks. Later on, in 1995, two big information technologies companies, Amazon and eBay decided to emerge and change the way business operates (Ayob 2020). The existence of e-commerce has helped many people live, from the users of e-commerce who utilize the service of the e-commerce and the sellers who use the platform to offer and compete for their products digitally (Li, Kim, Lang, Kauffman, & Naldi, 2020). On top of that, e-commerce also helped the seller to provide more information compared to physical store, that is why currently, many people are tend to choose e-commerce rather than physical store, it is because the users of e-commerce are younger generation, and younger generation see shopping as a decision making where it has to be decided after acquiring information of the products on the internet (Lissitsa & Kol, 2016).

The growth of digital commerce happened because of the financial crisis in 2007-2008 that began in the U.S and spread globally. After the incident, the world economy trends are having a shift, the growth of traditional economies are showing signs of slowing down. Meanwhile, the digital economy, with the help from technologies such as big data analysis, cloud computing, and artificial intelligence (AI), is having significant growth (Fourcade and Kluttz. 2020). After the financial crisis incident, the e-commerce industry kept growing in many countries until in the late 2019 COVID-19 pandemic spread throughout the globe that forced many industries to shift trends in order to survive during the pandemic.

According to (Babenko et al. 2019) the concept of e-commerce can be defined in to two sense which the first one is if we see e-commerce in a narrow sense, by using the internet and private communication networks, a person can made a financial transaction through e-
commerce services, in which the person has made a purchases of goods or services, while the payment method is ideally by using a simple confirmation by connecting the credit card to the smartphone in order to complete the transaction. And in a broader sense, the concept of e-commerce is a business transaction activity in which the seller and buyer is using internet technologies as the base of interaction.

The growth of the e-commerce industry is reflected in the growth of digital infrastructure in a country. The development of technologies is vital to stimulating economic growth (Wang & Chien, 2007). Hence e-commerce companies would not perform well if the digital environment does not support the needs of technology to support the operation of e-commerce companies.

According to Lurong Chen 2020, five factors need to be considered for e-commerce companies before operating in designated countries. The first factor is network coverage; without a high number of network coverage, there is no internet user, and people unable to access e-commerce applications. The second factor is the speed of the network connection. The next factor is the speed of network connection. Having a fast internet connection would help people to stay more connected to the internet. The third factor is the affordability of internet access, by having an affordable price for surfing in the internet, many people will start to adapt with internet for their daily life, and for the last factor is the security and reliability, the importance of cybersecurity is to protect the free flow of data from the possible cyber threats such as leakages of private information, these factors that can determine the improvement of a country toward digital connectivity of e-commerce.

When COVID-19 spreads globally in early 2020, most of retail company see that the pandemic would be a huge threat to the business, in the reality of the pandemic era, the virus helped few retail companies to speed up their transition to adapt to digital world, although there is a thousands of store and chains that closed for good during the pandemic, department store company such as Marks & Spencer from British successfully utilise COVID-19 pandemic to shut down their poor performing store and investing in e-commerce platforms, due to the shift
of business it has helped the company to surged the stock price as much as 60% (Townsend, 2021).

Knowing that there are few retail companies that utilise COVID-19 pandemic to speed up the digitalisation progress of the business operation, according to Khaliq, 2021. In the year 2020, retail industries around the globe experience a decrease in retail sales value as much as 1.9% compared with 2019, and for the impact towards the consumer retail sector such as clothing the volume sales decline for 21.5% in 2020. Therefore only few companies that can shift the business operation from brick-and-mortar to adopt the digitalisation through e-commerce in order to survive in pandemic times.

1.1.2 E-commerce in Indonesia Overview

Indonesia are projected to become the biggest e-commerce market amongst other ASEAN countries, in 2019, e-commerce industry in Indonesia are having rapid growth for the retail value, valued at US$19.24bn, a significant 61% growth from the previous year, also it was predicted to reach US$65.92bn by 2024 (Febransyah & Goni, 2020).

Although, Indonesia are having a rapid growth, there are certain challenges that can disturb the growth of e-commerce in Indonesia, lack of telecommunication infrastructure that hinder Indonesian people to use internet (Purbasari, Sari, & Muttaqin, 2020), On top of that, with the archipelago consisting of 17,000 it is not an easy job for logistic company to deliver the consumers good that have been purchased through e-commerce company, therefore many Indonesian online shoppers annoyed due to this situation (Febransyah & Goni, 2020).

Local e-commerce companies such as Tokopedia and Bukalapak are representative of unicorn companies in ASEAN, therefore it shows that in Indonesia itself e-commerce companies are starting to gain much attention from the local market (Sarathawong et. al., ). However the most visited e-commerce websites in Indonesia are from foreign companies, it was Shopee, e-commerce companies based in Singapore. Below is the table that shows monthly traffic of e-commerce sites in Indonesia as of fourth quarter 2020.
Figure 1.1 Top e-commerce sites in Indonesia as of 3th quarter 2019, by monthly traffic

Source: Trenasia, 2021

The users of e-commerce in Indonesia is increasing rapidly in Q4 2020 (Figure 1.1), in Q3 2019, the most visited website in Indonesia is Tokopedia (Figure 1.2), where the web visit of Tokopedia is 65,953,400. Hence during the 2020 Covid-19 pandemic, there is a significant increase in terms of e-commerce users. On top of that, in 2019 Tokopedia was dominating e-commerce companies in monthly web visits, and later on Shopee overtook the leaders of e-commerce web visits in Indonesia in 2020.

With the growth of e-commerce users in Indonesia, the Indonesian government started making strategies to tackle the impact of the pandemic by utilising e-commerce as the tools. According from Ministry of Communication and Informatics (Kominfo) Widodo Muktiyo (2020), during the pandemic, the Government will fully support the shift of SMEs to utilise
digital platform in order to adapt with the negative impact of Covid-19 (Purbasari, Sari, & Muttaqin, 2020).

Figure 1.2 Top e-commerce sites in Indonesia as of 1st quarter 2021, by monthly traffic

Source: Trenasia, 2021

Then for e-commerce trends during pandemic, each e-commerce companies are having growth in terms of monthly traffic except Lazada, uniquely while other companies are experiencing user growth, Lazada are having decline as much as 3 million users per month, meanwhile Tokopedia and Shopee are having a rapid growth during pandemic, both companies are having as much as 100% in terms of monthly traffic, therefore, the graph tell us that most e-commerce companies are experiencing user growth in pandemic times. Therefore one of the aims of this study is to understand the sudden growth of e-commerce usage during the pandemic in Indonesia.
1.1.3 E-commerce Trends in Indonesia

The trends of e-commerce in Indonesia is increasing from time to time, and all of a sudden, there are Covid-19 pandemic strikes, which there are will be few shifts in terms of users and sellers in the e-commerce market, Kim 2020 found out that the consumers adaptation towards e-commerce are increasing because of the pandemic, and the rising trends of e-commerce are not likely to show any slow down after Covid-19 era. During the pandemic era, the business to consumer of e-commerce market value is reported to keep increasing, Indonesia predicted to experience the biggest E-commerce compound annual growth rate compared to other countries (Refer to Table 1.1).

Table 1.1 J.P Morgan Navigate new global markets with our e-commerce payments trend, 2019

<table>
<thead>
<tr>
<th>Market</th>
<th>E-commerce market size</th>
<th>E-commerce compound annual growth rate (2017-2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>$13.6 billion</td>
<td>34.6%</td>
</tr>
<tr>
<td>India</td>
<td>$36.5 billion</td>
<td>26.5%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>$4 billion</td>
<td>24%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>$6.2 billion</td>
<td>18.9%</td>
</tr>
<tr>
<td>Thailand</td>
<td>$26.2 billion</td>
<td>12.5%</td>
</tr>
<tr>
<td>U.S</td>
<td>$744.1 billion</td>
<td>10.2%</td>
</tr>
<tr>
<td>China</td>
<td>$1.149 billion</td>
<td>9.2%</td>
</tr>
<tr>
<td>Australia</td>
<td>$33.1 billion</td>
<td>8.9%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Country</th>
<th>Amount</th>
<th>ARPU</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td>$4 billion</td>
<td>8.7%</td>
</tr>
<tr>
<td>Singapore</td>
<td>$4.9 billion</td>
<td>8.4%</td>
</tr>
<tr>
<td>Japan</td>
<td>$150 billion</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

Source: JPMorgan, 2019

According to Kemp 2020, in terms of average amount on e-commerce purchase or ARPU, Indonesia is placed the third lowest countries towards the average spending on e-commerce. (Referring to Figure 1.3) the average spend of Indonesia e-commerce users is recorded as much as $89, compared to the e-commerce users in Indonesia, the average spent number is very low.

![E-Commerce ARPU: Consumer Goods](image)

**Figure 1.3 E-Commerce ARPU: Consumer Goods**

Source: Kemp, 2020

Compared to the neighbour country such as Singapore, the gap of Average amount spent on e-commerce in Indonesia is very low, the gap is very significant, knowing that on average,
Singaporean people spent $1,010 annually on e-commerce to purchase consumer goods, on different aspect such as e-commerce users, Indonesia is projected to have massive numbers of e-commerce in the 2025 (Lestari 2019). Then the challenge for the e-commerce companies in Indonesia is how to increase the average spend of consumer goods on e-commerce.

In January 2021, Kemp 2021, reported that Indonesia is having an increase as much as $219 in terms of Average Annual Spend Per User or (ARPU). compared to the previous ARPU data which in 2018 Indonesia e-commerce users are reported to spend only 89$ per year, the reported data shows that there is a significant increase of users spent on e-commerce during pandemic, therefore the increase of e-commerce usage during pandemic is very obvious as we know that there are many significant increase in terms of monthly visit and average annual spend per user.

1.1.4 E-commerce During Pandemic

COVID-19 started in late 2019, and the pandemic has impacted almost every industry globally, COVID-19 are predicted to last as much as 18 to 24 months (Moore et al., 2020). According to the prediction the pandemic will have a long period of time, therefore it will force many industries to reshape its framework to adapt to the COVID-19 era.

The infectious disease of COVID-19 could take millions of deaths globally according to the rapid spread of the virus globally, which resulted in the destabilisation of governments, travel bans, and restricted international trade. (Harvard Global Institute, 2020). With the fear of COVID-19, many researchers have projected the influence of covid-19 pandemic related to the consumer spending and purchasing behaviour (Tran 2021)

Many countries has implied lockdown as the strategy to slow down the spread of the virus in the country, therefore, during the lockdown practice, many people spend most of the time at home, people start to be disconnected with each other as the impact of lockdown, luckily in these era, the era of technology, many people can still connected with one and another through online media (Kusuma et al. 2021).
During the lockdown, the digital industry are having a major growth, knowing that many people start to utilise the current technology to keep connected between each other and to pursue happiness during lockdown with technology, digital services such as video streaming, online education, and e-commerce is the one that accompany many people during lockdown, and for e-commerce, during the lockdown, the youngest internet consumers which are Generation X with the proportion around 12% are recorded doing online shopping activity for the first time (Li, Kim, Lang, Kauffman, & Naldi, 2020).

Because of COVID-19 pandemic, there is a shift in consumer behaviour in terms of making a purchase online, the pandemic accelerated consumers' behaviour to start adapting with e-commerce, and the consumer adaptation to e-commerce would not slow down after COVID-19 era. Knowing that many people spend their time by staying at home, it could trigger people who never use e-commerce to invest their time by learning on how to use e-commerce, it is because one of many factors that hinder people to use e-commerce is they are reluctant to learn how to use e-commerce (Kim 2020).

The Indonesian government saw opportunities with the correlation between pandemic spreads, the growth of the digital platform, and the importance of SMEs towards Indonesia GDP growth. The Indonesian government started to push the SMEs in Indonesia to adapt the digital platform to keep performing during the pandemic. SMEs in Indonesia contribute as much as 60% to the Indonesian GDP, unfortunately according to Digital Marketing Expert Adreas Agung Bawono (2020) currently in Indonesia the population of SMEs that have adapt to the digital platform only 13%, therefore Indonesian Government expected to speed up the increase of SMEs to go digital during pandemic (Purbasari, Sari, & Muttaqin, 2020).

In April 2021, Kemp 2020 reported that Indonesia ranked 1st globally in terms of percentage of internet users aged 16 to 64 who bought something online via any device, the phenomenon of sudden growth in the number of e-commerce adoption in Indonesia is unique.
since the factors of that affect a person the choose e-commerce is the main topic that will be discussed in this study.

Figure 1.4 Percentage of Internet Users Aged 16 to 62 Who Bought Something Online Via Any Device

Source: Kemp, 2020
1.2 Problem Discussion

Before Covid-19 exist in Indonesia, the e-commerce industries are having a rapid growth, Febransyah & Goni (2020) find that in 2019 the retail value of e-commerce in Indonesia are having a rapid growth, with the estimated market value of US$19.24 billion, and at that time the market value of e-commerce in Indonesia are expected to reach US$65.96 billion in 2024, those prediction were made before covid-19 exist and disrupt most industry around the globe.

Therefore, this study found that e-commerce industries is unique compare to other industries, during pandemic many industries are having a decline in doing business, especially the retail business which are having a hard times during pandemic due to the social restriction that government around the globe impose to reduce the spreads of the virus that resulting in limiting their hour of business operation and the number of customer that allowed in the store, while e-commerce seems invincible to the virus due to the operating of e-commerce are much easier compare to traditional store, which the users only required a smartphone and cellular data in order for them to able to use e-commerce platform.

During the Covid-19 period many generations start do adopt e-commerce as the solution to complete shopping need through smartphone, the use of e-commerce from Generation-X are start to increase during the pandemic times, the transaction of e-commerce from Generation-X are start to competing with Millennials during pandemic (Pitoko, 2020). According to Ha (2018) Generation X who were born between 1960-1980 is one of the strongest consumer segments of e-commerce services after millennials. These generations mostly are standing at the peak of their career and have become the most important decision makers both in families and companies because of their experience compared to the millennials. Therefore this research is going to find the influencing factors towards Generation-X to adopt e-commerce during the pandemic times.

1.3 Research Question

According to the problem discussion above, it leads to the research question that seeking to explore on e-commerce during the pandemic, that is:
“What are the dominant factors that influence Generation-X in Jakarta to adopt to the e-commerce platform during the pandemic”

Furthermore, from the main research question, there are six sub-question to be developed:

1. Does perceived usefulness exist as one of the factors that affect Generation X to use E-commerce services in Jakarta?
2. Does perceived ease of use exist as one of the factors that affect Generation X to use E-commerce services in Jakarta?
3. Does government support exist as one of the factors that affect Generation X to use E-commerce services in Jakarta?
4. Does perceived lack of alternatives exist as one of the factors that affect Generation X to use E-commerce services in Jakarta?
5. Does planned behaviour control exist as one of the factors that affect Generation X to use E-commerce services in Jakarta?
6. Does subjective norm exist as one of the factors that affect Generation X to use E-commerce services in Jakarta?

1.4 Research Objective

The objective of this study is to determine whether the factors perceived usefulness, perceived ease of use, government support, perceived lack of alternative, planned behaviour, and subjective norm has an impact on Generation X’s intention to use e-commerce services. This objective was established due to the rising trends of e-commerce because of the huge impact of the growing electronic commerce developments in Jakarta.

1.5 Research Scope

The scope of this research is e-commerce platforms users between Generation X who were born between 1960-1980 (Fisher & Eccleston, 2019). Generation-X adopt and finally make a purchase through e-commerce platforms during pandemic and social restriction times in the Jakarta area.
1.6 Research Aims & Benefits

Based on the research topic, there are four groups that can be benefitted from the result of this study such as, companies, government, investors and for the future academic researcher.

These are the four groups that can receive the beneficial of this study:

1. Companies
   The study will be able to give insight in terms of factors that are influencing Gen-X to adopt e-commerce services. Hence the e-commerce companies can provide better strategies towards Gen-X needs to adopt their platforms.

2. Government
   The government will be able to understand the regulation that they imposed during Covid-19 pandemic towards e-commerce industries, and the needs of regulation for e-commerce and sellers to ease the operation in Indonesia.

3. Investors
   Knowing that there is a gap between generations in terms of e-commerce use in Jakarta therefore, investors can be informed that there is still a huge market for Gen-X to use e-commerce and can invest in e-commerce platforms since the industry keeps growing year by year.

4. Future Research
   The study will be able to provide an insight and in-depth analysis that can be used for future researchers who want to study about the influence factors that affect Generation X to adopt e-commerce services in the Jakarta area.