CHAPTER I

INTRODUCTION

1.1   Research Background

The background of this study is to determine the effect of *logistics information technology* on relationships in logistics and the level of service quality provided in Tokopedia Company. *Logistics information technology* is a system which facilitates tracking and detecting the presence of shipping goods in a shipping process which is intended to minimize the loss of a delivery load to the company's clients and to protect the security of the product from unexpected damage. In terms of logistics is one of the things that influence the economic drive system in terms of exports and imports both domestically and internationally as well as one of the contributors of funds to infrastructure development in Indonesia. At this time, there have been many large companies that have expanded to several overseas regions which are accompanied by technological developments and the exchange of information that has evolved over time so large companies must be able to adopt technology into their companies in order to coordinate well and establish relationships and maintain product quality which exists. With the help of technology in the logistics world, companies get an allowance in a supply chain while small and medium companies still use a manual system in coordinating with limited integration power and the possibility of a good relationship between the expansion branches of the company (Anandhita & Dwiardi, 2018;78).

The company must innovate and invest in order to support the company in competing and guarantee that any existing activities are carried out clearly, thereby reducing the worry or doubt of consumers who contract with the company. By using a number of technologies, the company will be facilitated with operational automation so that it will lead to a more efficient and effective performance and companies can reduce the costs that must be spent to pay workers in several fields and reduce the risk that can occur if it does not go according to the plan set by the company. Companies need technology assistance because they are affected by a number of obstacles that must be immediately resolved so that the role of technology is expected to help overcome these problems. By using technology can help solve problems not only internally but also externally where there are standards that must be met in the delivery of goods, lack of coordination among workers and the existence of policies that do not support the logistics sector at this time and going forward. Currently *e-commerce* companies have collaborated with logistics companies to overcome problems and achieve SLO (service level objective), which consists of (quality, cost and time) so that logistics management can run well (Zaroni, 2015 cited by Anandhita & Dwiardi, 2018;78). With the help of technology as well as increased integration and management of the flow of goods and services that occur makes supplier chain management more very common (Singh, 2013;62). In addition logistic relationship is a picture of the relationship between several variables to the main variables to be addressed where the correlation can be seen mutually supporting one another so that explains why an impact can occur.

The increasing number of competitors in the logistics industry, it is necessary to be able to compete with one another by establishing good relationships with business partners so that they can survive so that later they can help each other in the supply or assistance in the distribution media (Kansil & Pondaag, 2015;78). These variables are expected to produce good service quality logistics which is the development of service quality to measure consumer satisfaction in logistics for Tokopedia Company. *Logistic service quality* can be implemented well, it will have an impact on satisfaction and continuity of cooperation with consumers (Japrianto, 2018;25).

In this case, technology and logistics services are the main pillars in this research, where if you look back at the early days of technology, it was created more than 30 years ago in a book entitled the third wave by Alvin Toffler where he stated that the third wave was a time in which The technological era was one of the biggest waves in that era, to be precise in 1980 where this era was described as an era that followed the two previous eras that had occurred, to be precise the industrial era and the agricultural era at that time (Suwignyo, 2018;394). At that time, it was not only because it was an era of development, but was driven by the characteristics of society that also changed over time which was studied by a sociologist, namely Manuel Castell in 2000 where the development of technology took place with changes in the labor market sector which was increasingly flexible and knowledge-based (Suwignyo, 2018;394).

In the end, it changes the pattern in society so that it affects how a person's character changes but has a good impact on the performance of the community at that time where at that time the community became more flexible and quick to adapt to the changes that occurred. However, if you examine more deeply, it can be seen that "*history will repeat itself*" where at that time the community changed due to technology itself but was not involved again because it had succeeded in integrating with society or was stagnant, but if it is related to this period, 2020 will be faced with pandemic conditions. Technology has begun to emerge from a period of stagnation where it can be seen that with the pandemic the more technology has developed, the more companies operate without meeting and the emergence of various new application tools that can be reached only in the palm of your hand. It should be noted that without realizing it, 2020 will be a form of restarting both for the economy and technology, but of course, restarting always has a negative impact, by chance, the sector experiences shipping barriers so that automatically there is a form of slowdown in economic movements due to the impact of the pandemic.

It is unfortunate that the logistics sector has been severely affected, where the logistics sector itself is basically one of the economic movements in terms of export and import, both domestic and abroad. Therefore, it has an impact on the economic itself, especially supported by the economic downturn in the second quarter of this semester. Later will become a big question mark regarding conditions later in the third quarter and if there is any further weakening of the economic, as the result of the economic weaking is Indonesia will enter the abyss of recession which will have an

impact on the weakening of people's purchasing power. It cannot be denied that the needs must be met and the technology and logistics services remain one of the pillars of activities in today's society where service quality should automatically increase to sustain people's purchasing power to at least reduce the minus risk to the Indonesian economy in the third quarter. At that time, it was driven by the desire to be integrated with other countries in terms of trading using existing technology at that time until the formation of several countries that joined and implemented free trade areas such as for example ASEAN where over time there was a form of adjustment to economic conditions and politics that takes place with various demands and adjustments that must be made in order to establish good integration. This is a part of world history but as world history does not mean it cannot be reached by today's society because this history is still and will continue to be attached as a foundation for developments that will occur in the future. The era of technology it has started in 1970, precisely in America where at that time it was the first time (Suwignyo, 2018;395). That computer hardware and software were created and the internet system were found, where the device was created to provide communication during the world war that hit the United States which had occurred during the war.

However, new technology was developed seriously after going through the cold war in the twentieth century and experienced a very rapid development at that time, where there are two main markers of the start of the main technological era, namely the end of the cold war and the occurrence of changes in the ideological structure of each country (Suwignyo, 2018;395). With changes in ideology and

political conditions within a country, it had an impact on economic instability at that time, resulting in the impact of a form of clash of civilizations that took place and a damaged environment as a result of the war that had taken place in America, where at that time the technological era was initiated by the tools. Computers are accompanied by the telecommunications era, namely the telephone created by Alexander Graham Bell which was previously patented by him in 1876 but was only redeveloped by America after the cold war in 1992 (Suwignyo, 2018;396)

Along with technological developments that are taking place on the other hand there are industrial developments that continue to develop where along with the end of the cold war at that time the industry has started operating normally again coupled with the development of technology that has also developed, the level of competition between industries has become tighter to compete where at that time the company competed to provide needs aggressively and tried to create a system for providing goods by creating a stocking system to be more effective in distributing products to the community but other problems arise in terms of production costs and raw materials that also increased with the end of the cold war, making it difficult for the industry in terms of the supply of goods with a limited supplier due to the impact of the war that caused many businesses to fall and go bankrupt automatically having to build a new system with the new normal conditions happened at that time like the sentence that has been mentioned above history repeat itself so that each period has its own difficulties with different challenges but still in the same condition standard. Various new demands created (SCM) supply chain management which is defined as an

organizational network that connects upstream and downstream in different processes and activities that produce tangible values and different results, both goods and services up to the hands of consumers. Based on the order of the level of cost in a logistics industry ranks second after raw materials as the first holder in terms of the largest cost level, where these conditions encourage SCM to evolve in various aspects both in functional, intra-enterprise: corporate excellence, inter-enterprise processes: partner cooperation, external networks: value chain and total business systems: full network connectivity.

However, the level of cost is still the main problem until now due to other factors that have increased, namely currency price fluctuations, gaps between countries, regulations governing trade, slow development of infrastructure, and slow distribution, of course, due to information trouble and ineffective. Covering up the possibility that in the era of technology, still developing logistical operations errors could occur, which would make things messy. The existence of conditions with frequent error information flow, it is necessary to develop in technology (TN Varma & Khan, 2014;35), Where it is stated based on the results of a survey by the Indonesian Internet Organizer Association (APJII) in 2018 with the title penetration and profile of internet users in Indonesia, it states that internet users reach 171.1 million users out of a total of 264.16 million people spread across various regions in Indonesia.

That means the Internet users in Indonesia are only 64% of the total in recent years where the island of Java which is has contributed 55.7%, where in Bali and East

Nusa Tenggara, it is around 5.2% of internet users (Palinggi & Limbongan, 2020;227).

So it is a big note for the government that in Indonesia infrastructure it is still not

optimal and that slow subscriptions have become one of the option that have hindered

the movement of the Indonesian economy even better. If examined more deeply in

terms of the distribution of its location, it was found that in urban areas it was 74.1%,

while those who had not had internet access were 25.9% of the total population.

While in rural / rural areas there are 61.6% of internet users and the remaining

38.4% who do not access the internet, but in the midst of the conditions of internet

users that are not yet optimal, it can be seen that there are still positive things where

the internet has reached rural areas in Indonesia (Asosiasi Penyelenggara Jasa Internet

Indonesia, 2018). The following is a picture that explains the level of internet users

(Figure 1.1), the level of internet users in Indonesia based on region (Figure 1.2) and

the comparison of internet users between urban and rural / rural communities (Figure

1.3) obtained from the 2018 report by the Internet Service Providers Association

Indonesia.

Figure 1.1: The level of internet users In Indonesia 2018
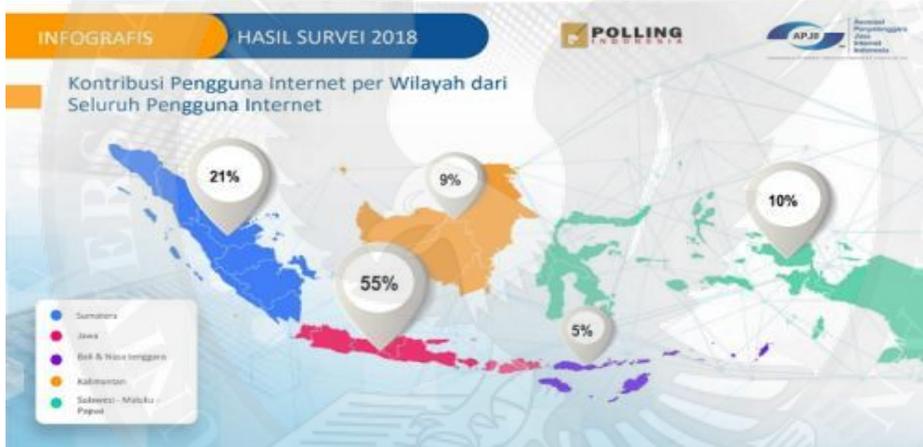*Source : Asosiasi Penyelenggara Jasa Internet 2018*

Figure 1.2 : The level of internet users in Indonesia based on region
Source : Asosiasi Penyelenggara Jasa Internet 2018

Figure 1.3: The comparison of internet users between urban and rural / rural communities
Source : Asosiasi Penyelenggara Jasa Internet 2018

Tokopedia itself is one of the *e-commerce* companies that has been established in Indonesia where Tokopedia is here to help Indonesian people to have chance in business but they don't need to spend a lot of capital to run them because they are operated online   where in other words Tokopedia tries to provide business opportunities for the Indonesian people. Tokopedia is an *e-commerce* company where *e-commerce* itself is defined as a purchasing process, exchanging products, services and information through computer networks (Irmawati, 2011; 97). It was stated by Rahmati (2009) that *e-commerce* is a marketing system using electronic media (Rahmati, 2009 citd by Irmawati, 2011; 97). With the main objective of reducing poverty levels and increasing the number of umkm entrepreneurs in Indonesia. They see a form of challenge from Indonesia itself where the condition of the slow and inadequate infrastructure becomes a form of barrier to being able to operate in the

business world so that Tokopedia tries to provide a special integrated access to make it easier to connect with consumers and suppliers in a cycle of doing business.

Tokopedia itself began operating since 2009 under the control of Mr. William Tanuwijaya where at that time Tokopedia was still an SME (Small Medium Enterprises) company, making it easier for Tokopedia to expand quickly and get several injections of funds from one of them is Softbank at this time Tokopedia continues to provide and innovate continuously in providing other side services to simplify everyday life. Tokopedia is the first online store that provides online shopping opportunities and makes it easier to find needs (Lupi, 2016;20). One of the injections of funds came from the largest *e-commerce* company, Alibaba from China through the intermediary Softbank, which acts as a funding bank for the company's current operations. If it is clarified, so far Tokopedia has received a lot of funding from PT. Indonusa Dwitama in (2009) then continued with funding by East ventures (2010), Cyber agent ventures (2011), Net Price (2012) and soft bank ventures (2013) (Endra & Hermawan, 2017;171). Tokopedia has a vision and mission where visually they want to help build Indonesia by using Internet as a media where to build an ecosystem where anyone can start and find something and have a mission to provide opportunities for every individual in Indonesia to open and run a business where the Tokopedia company focuses on holding three main pillars in maximizing services to each partner and its consumers, namely focusing to consumers, growth mindset, make it happen and make it better where these three things help Tokopedia in making decisions,

making business strategies and helping in determining future steps. In addition, Tokopedia currently states that they are creating world-class technology so that it can continue to create a form of job opportunity and reduce unemployment and increase the circulation of money so that it can help Indonesians be even better in achieving their dreams (PT.Tokopedia, 2009).

The inflow of funds from several investors who are interested in future opportunities for the Tokopedia company is put to good use where the funds are channeled to carry out its mission, namely to carry out digital equity in Indonesia which is in line with the government's goals. The funds are also channeled into training to improve the quality of human resources in Indonesia itself, especially in remote areas so that it can help advance the economy in Indonesia. Currently, Tokopedia itself is conducting research in conjunction with the University of Indonesia to develop the first AI development center in Indonesia which is aimed at solving various problems of *e-commerce* companies, especially for Tokopedia itself, namely risk management, logistics, cyber security and ongoing payment processes (Din, CNN Indonesia, 2019). On the other hand, carries a new concept, namely "*Smart Logistics*" with the aim of making the trading platform more efficient. The concept meant is how Tokopedia can provide access to all of Indonesia to access products along with same day delivery. William stated that if Tokopedia succeeds in developing *Artificial Intelligence*, it will help Tokopedia estimate the demand in an area by building a warehouse so that shipping can take place faster and can be done on the same day as the order with the

smart logistic concept, with the *smart logistics* with predictable demand seller can deposit their products in the warehouse so that it becomes like having their own office (Deandra Syarizka, 2019).

1.2   Research Problem

This research was conducted to find the relationship between technology and the *logistics service quality* function of Tokopedia companies today, where there are several things to prove their relationship with consumers as follows:

1) Is there a new relationship between *logistic information technologies* on *logistic service quality* on a Tokopedia regular basis?

2) Is the use of technology at this time optimal in supporting the logistics performance itself to encourage increased consumer service quality efficiently and effectively in Tokopedia?

3) Does technological development in the world of logistics have a significant impact on Tokopedia consumer satisfaction itself?

1.3   Research Purpose

This research was conducted on the basis of knowing several factors that affect Tokopedia company performance as follows,

1) To determine the effect of variables (*consumer trust, consumer satisfaction, consumer bonding, consumer communication, consumer commitment and especially logistic information technology*) on *logistic service quality*.

2) To find out the effect Tokopedia *logistic information technology* on *logistic service quality* to consumers.

3) What can be further developed from the Tokopedia *logistics information technology* on Tokopedia *consumers satisfaction.*

1.4   Research Benefit

As this research is taking place, of course, it has the ultimate goal where it can contribute to Tokopedia, especially in the development of the technology and logistics sectors that influence each other positively so that operational activities can run well and achieve optimal consumer satisfaction in accordance with company expectations.

1.4.1 Theoritical Benefit

The benefit of this research is to assist in the development and improvement of technology that takes place in the implementation of the logistics performance of Tokopedia with the aim of increasing *logistic service quality*, which to know the impact of technological improvements that occur will have a positive impact on logistics performance or not in better distributing consumer orders and fulfilling consumer orders. *Consumer satisfaction* expectations when shopping using *e-commerce* (Tokopedia) media to meet other needs after basic needs are met and increase the commitment of the consumers themselves in using logistic services of *e-commerce* companies.

1.4.2 Practice Benefit

The benefits that can be applied directly to technology and logistics are that with this research, Tokopedia companies can replace technology or make improvements in terms of server quality or reporting systemization of the ongoing logistics delivery process accurately and delete some activities or systems that are not make a significant contribution to the supply distribution process of logistics goods. So with this research carried out it is hoped that it can help *e-commerce* companies have a new view of technology systemation in the logistics sector so that value consumer service quality can be delivered optimally and achieve efficient and effective operational activities in its implementation, so that it is expected that later it can be used as a guide in compiling the system, technology in Tokopedia companies.

1.5 Writing System

CHAPTER 1 INTRODUCTION

This chapter will discuss the background of research on how technology and logistical activities can take place in the past few years. So that we can see the basic beginnings of the two main factors. The formulation of the problem, the research objectives and the benefits of research which in this section is divided into two, namely usefulness. Theoretical and practical benefits which are expected to contribute to the world of technology and logistics of *e-commerce* companies.

CHAPTER 2 LITERATURE REVIEW

This chapter will discuss the literature review which consists of the concept of variables used in this study. How significant influence it is on other variables, hypotheses about the research description. Also the research model that explains how each variable involved is related and forms a flow. So that researcher can understand how this research clearly.

CHAPTER 3 RESEARCH METHODS

This chapter will discuss research methods which are intended to provide an overview of how this research was carried out and how the data processing system will be implemented later. Its consists of research objects, units of analysis, types of research, operational research variables, population and samples, determination of the number of samples, sampling methods, data collection methods, data analysis methods, research instrument testing, validity tests, reliability tests and preliminary instrument test results. In turn provide a rough picture of the data that has been collected through the media numbers listed in the final results table data. So researcher know how the process significantly from the begining to the end fo the research.

CHAPTER 4 RESEARCH RESULTS AND DISCUSSION

This chapter will discuss the description of the results obtained and how each variable involved has an impact on the final result. So that this research can be confirmed to be validated and reliable to be trusted by the final reader and can be used

as a material consideration for developing logistics services and technology provided. Later will be discuss about how to see each variable effect the dependent variable by using *P-value*, *T-statistic*, *Original Sample* and *Inner model*. So each of the effect will be explained briefly.

CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS

This chapter is a defining chapter for this research where there are final conclusions from research based on ongoing data processing and as the basis of recommendations given in the development of technology and logistics services for *e-commerce* companies. So researcher can understand in terms of their application, regardless of whether they will be used reference or for consideration only. At the end we will discuss about the manajerial implication for Tokopedia to keep improving. To explain how well this research been process.