### **CHAPTER I**

### INTRODUCTION

## 1.1 Background

In the current of globalization era, it is almost universally accepted that the internet plays an increasingly higher role in each of our lives. Presence of internet technology in societies are very important to support human's life. It shows that internet and other communication media becomes the majority need of people. Introduce since 1969, internet experiencing extraordinary development. The reason of internet being popular is it has connectivity and wide scope, also it is decreasing the cost of communication.

The internet is flexible, interactive and ease of use. In other word, all conveniences in human activity that complex could be given through internet. The technology of internet connecting between individuals and groups. It could be business, education, government and another environment object. It provides an access to communication service scattered through Indonesia and world.

Rapidly increase of the internet causing the complexity of user on the map of internet user. It can help to find the popular issue from regional aspect. Thus, these concepts of mapping people can build the new database based on the region. Internet can be the powerful things in this era, and people should take an advantage of the internet user. Internet consuming in Indonesia are increasing in a couple of years, thus, the usage of internet in Indonesia can be diverse. The utilization of internet in Indonesia is shown in Figure 1.1

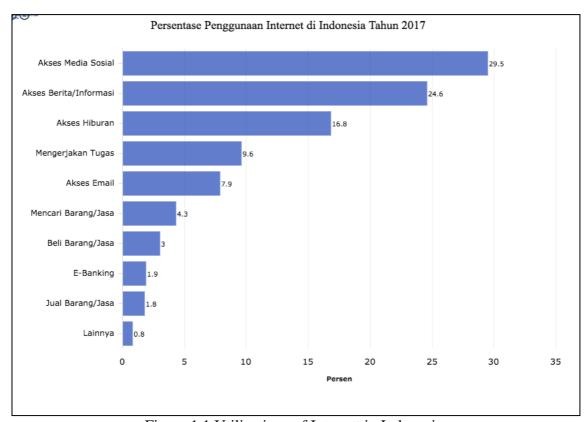


Figure 1.1 Utilizations of Internet in Indonesia

Source: https://databoks.katadata.co.id/datapublish/2018/07/23/9-kegiatan-masyarakat-indonesia-ketika-mendapat-akses-internet

According to Asosiasi Penyelanggara Jasa Internet Indonesia (APJII) survey data, internet users in Indonesia in 2018 have reached 142 million people with a penetration of 54.69 percent of the total population. The utilizations of internet in Indonesia has 9 events, there are accessing social media, information and news, for assignment, email, find out products or services, purchasing, e-banking, selling, and others. The percentage of social media is the highest usage of internet in Indonesia, accessing the commerce has the below 5% of the population, it shows the perception of people about e-commerce is weak.

In today's business world, technology is seen as an important catalyst for the restructuring of commercial activities and business development strategies. Digital technologies have proven to be the drivers of economic growth and competitiveness (Apavaloaie, 2014). It means, digital technologies are surrounded by the society as the business movement challenge to develop their own firm. Electronic commerce is defined

as 'all electronically mediated information exchanges between an organization and its external stakeholders' (Chaffey, 2007). Thus, this commerce in electronic became the basic to have a trade among firms in this era, which makes the trading easier and transparent. The online trading which requires two perpetrators in order to have the process of electronic commerce occurs. According to Bakos (1998), the reasons behind ecommerce's success lie upon its successful leverage of information technologies to offer a platform where there is an increased effectiveness and decrease in transaction costs consequentially leading to an increase in efficiency. Intercourse of transparency information builds the accuracy of customer as the purchaser as well as the company. Therefore, the important of successful e-commerce is efficiency of information about its quality of the products and services. The services become the long-terms sells beside product sales to have the satisfaction of customer which result the loyalty of customer.

The e-commerce needs a container as the place to buy and sell a product. There are some sites that provide the online trading which plays a major role to trading in online aspects. Indeed, the sites consist of Zaloara, Lazada, Berrybenka, Olx, and Tokopedia. Those sites accommodate the e-commerce company to deploy their products to customer. The businesses that applied in those sites are C to C business model. The business from anywhere and anyone that could open online store for serving prospective buyer nor buy product from the other customers throughout Indonesia. There are top 5 best e-commerce that exist in Indonesia based on Top Award Survey in Branding Index 2017, it is shown in Table 1.1.

Table 1.1 Top Award Survey in Branding Index 2017

MEREK	TBI	TOP
Zalora.co.id	40.1%	TOP
Lazada.co.id	17.1%	TOP
Berrybenka.com	6.4%	
OLX.co.id	2.7%	
Tokopedia.com	1.8%	

Source: (Top Award Survey in Branding Index 2017)

According to data from Top Award Online Sites Category in 2017 it shows that Tokopedia has the lowest ranked with TBI 1.8 %. Compared to others online trading site, Tokopedia loss to others competitors in similar category that shows in the figure above. Thus, it proves that the satisfaction customer plays a big role in order to make the

Tokopedia being superior beside its competitors. This matter can be affected by customer satisfaction. Chase et al. (2006) mentioned that E-Service Quality or also known as E-ServQual is a new version of Service Quality (ServQual). E-ServQual was developed to evaluate a service provided on an Internet network. E-Service Quality is defined as an extension of the ability of a site to facilitate shopping, purchasing and distribution activities effectively and efficiently. In this research, E-SERVQL is to obtain the attributes from its dimensions.

Tokopedia is the company which field on the e-commerce site for transaction online. Top Branding Index or TBI is survey institute that focus on the branding image of e-commerce company in customer perceptions. Tokopedia has the lowest TBI that shows need improvement. The researcher interest to analyze Tokopedia based on its electronic service quality. To have a proper analyze, the research build the electronic service quality framework to facilitate the analysis. Tobagus (2018) state that the electronic service quality framework consists of 8 dimensions, every dimension has its attributes. The dimensions are web design that consist of four attributes, navigate structure, interface, fast presentation and updates information, responsiveness dimension consist of three attributes, willingness to help customer, readiness and promptness, confidentially of security dimensions consist of physical security and financial security attributes, approachability of access dimensions consist of ease of contact and timely access, efficiency dimension consist of convenience and promptness, system availability consist of accurate order and error, fulfillment dimensions consist of trustworthiness and reputation of service, the last is merchandising dimensions that consist of number of offering and variety of offering.

Perception of customer in in Tokopedia on the service quality framework is the case characteristic of this research. To have a propriate result, researcher tries to make the prioritized analysis of electronic service quality framework dimensions and attributes for further decision making as well as the suggestion to reach the capability of the company in increasing the electronic service quality of its e-commerce. Fuzzy logic is the tools to have the prioritized dimensions and attributes of electronic service quality where the input of this case is the rule that based on the expert and the mean score of the

questionnaire. Therefore, the output of this research is more valuable and acceptable for the development of the Tokopedia as e-commerce to compete in others e-commerce.

Fuzzy logic is a mathematical expression that is used to represent uncertainty, inaccuracy, lack of information, and ambiguity between true or false at the same time but some great truth and error of a value depends on the weight of its membership (Mamdani and Assilian, 1975). Therefore, the fuzzy logic is very useful for decision making which is consist of information that have ambiguity on it, also to make the decision more reliable. The fuzzy logic will be applied to evaluate the dimensions and attributes of electronic service quality framework.

In order to decide the prioritized dimensions and attributes in electronic service quality framework to satisfy the customer, the research apply integration of Electronic Service Quality (E-Servqual) framework with Fuzzy Mamdani method. Fuzzy set determination is the parameter for every input in electronic service quality framework. The fuzzy rule gain from the expert to analyze the result on defuzzification. Based on the defuzzification, the prioritized dimensions and attributes of electronic service quality framework appeared as the final result to give a suggestion for the company in order to improve the electronic service quality from its prioritized dimensions and attributes.

#### 1.2 Problem Formulation

Based on problem in background, the formulation of the problem to be addressed in this study are:

- 1. What are the prioritize attributes of dimensions to be improved as electronic service quality in order to achieve the customer perception?
- 2. What should manager do in action to improve the electronic service quality of the chosen attributes?

## 1.3 Research Objective

The objectives of this research are:

- 1. Identify the prioritized attribute dimension that influence the electronic service quality to achieve the customer perception.
- 2. Identify the action should do by the manager to improve the electronic service quality of the chosen attributes.

#### 1.4 Research Benefit

This study is expected to provide benefits to the parties involved. The benefits are:

1. For Author

This study was conducted to obtain a degree in Industrial Engineering. Knowing a relational alliances between e-service quality and customer satisfaction.

2. For Company

The results of the study can be used as consideration evaluation of continuity relation provides actions for manager in electronic service quality.

3. For other party

The results of the study can be used as additional knowledge, consideration and comparison for future research, particularly research on service quality.

# 1.5 Problem Limitation

The problem limitations of the author during the research are:

- 1. The research was not niche to the category aspects of the e-commerce
- 2. This research was adopting the previous research of an expert that research on ecommerce
- 3. Point of view on the result of this research wasn't similar to the previous research
- 4. This research only focuses on improving dimension in Electronic Service Quality
- 5. Implementation is out of this research