



**FACTOR AFFECT YOUTH CUSTOMER SATISFACTION TOWARDS E-COMMERCE
MALAYSIA**



**Faculty of Technology Management and Technopreneurship
Universiti Teknikal Malaysia Melaka**

FACTOR AFFECT YOUTH CUSTOMER SATISFACTION TOWARDS E-COMMERCE
MALAYSIA

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I hereby acknowledge that this project paper has been accepted as part of fulfilment for the degree of Bachelor of TECHNOPRENEURSHIP



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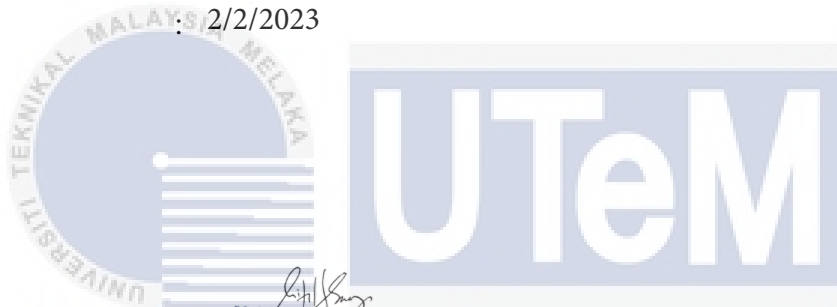
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DECLARATION OF ORIGINAL WORK

I hereby declare that all the work of this thesis entitled “FACTOR AFFECT YOUTH CUSTOMER SATISFACTION TOWARDS E-COMMERCE MALAYSIA” is original done by myself and no portion of the work encompassed in this research project proposal has been submitted in support of any application for any other degree or qualification of this or any other institute or university of learning.



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ABSTRACT

In this modern age, e-commerce had become a culture and a purchase behavior in our daily life. However, the customers will feel unsatisfied when the service provider can't serve them appropriate. Thus, the current study was conducted to explain to determine the factor which will affect the youth customer satisfaction on E-Commerce Malaysia, the relationship between the youth customer satisfaction and E-Commerce Malaysia and the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia. Quantitative methods have been applied this research for data collection purpose. Data were collected on the five-point Likert scale through questionnaire survey from the youth residences Malaysia in Malacca. The data was gathered from 384 respondents located in Malacca, Malaysia. Statistical Packages for Social Sciences (S.P.S.S) version 21 had been used as a analyze tools to analyze the data. The reliability of the instrument was ensured by Cronbach's Alpha test. In addition, Pearson Correlation and multiple regression tests had been applied to measure the nature and size of the association between variables and research hypotheses.

Keyword: e-commerce, customer satisfaction, youth

ABSTRAK

Pada zaman moden ini, e-dagang telah menjadi budaya dan tingkah laku pembelian dalam kehidupan seharian kita. Walau bagaimanapun, pelanggan akan berasa tidak berpuas hati apabila pembekal perkhidmatan tidak dapat memberikan perkhidmatan yang sewajarnya kepada mereka. Oleh itu, kajian semasa dijalankan untuk menjelaskan untuk menentukan faktor yang akan mempengaruhi kepuasan pelanggan belia terhadap E-Dagang Malaysia, hubungan antara kepuasan pelanggan belia dan E-Dagang Malaysia dan sejauh mana kesan kepuasan pelanggan belia terhadap E-Dagang Malaysia. Kaedah kuantitatif telah diaplikasikan penyelidikan ini untuk tujuan pengumpulan data. Data dikumpul pada skala Likert lima mata melalui tinjauan soal selidik dari kediaman belia Malaysia di Melaka. Data dikumpul daripada 384 responden yang berada di Melaka, Malaysia. Statistical Packages for Social Sciences (S.P.S.S) versi 21 telah digunakan sebagai alat analisis untuk menganalisis data. Kebolehpercayaan instrumen telah dipastikan oleh ujian Alpha Cronbach. Di samping itu, Korelasi Pearson dan ujian regresi berganda telah digunakan untuk mengukur sifat dan saiz perkaitan antara pembolehubah dan hipotesis penyelidikan.

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CHAPTER 1

INTRODUCTION

1.1 Background of the Research

In the 21st century, the internet was popular and it had become a culture in our daily life. With the access of internet, everyone can search for the information anytime and anywhere using the device such as smartphone, tablet, and computer ([N. Bahari, 2021](#)). Normally, people use the internet by searching for the product information, educational purposes, comparison of price and quality, and fund transfer ([Javadi et al., 2012](#)). [Department of Statistics Malaysia \(2021\)](#) stated the usage of internet in 2020 had achieve about 89.6%. It was strong evidence shows that internet had been used by all the age groups from youth to adults.

According to EX-Youth and Sports Minister Syed Saddiq Syed Abdul Rahman, there is a change about Youth Societies and Youth Development Act (Amendment) 2019 (Act 668) which is “Youth” had been defined as the person between 15-30 years old ([Arfa Yunus, 2019](#)). In this age period, they will be easily affected by the things surrounding them such as people and environment ([P. S. Ngo, 2021](#)). The buying behavior of youth in Malaysia had been changed since the arise of internet. Usually, youth surf the internet for educational purposes, work, and social media ([N. Bahari, 2021](#)).

Customer satisfaction is a positive net perceived service value from suppliers ([Oliver, 2000](#)). Customer satisfaction with online shopping can motivate consumers to shop online and revisit the store. In order to retain existing consumers and attract potential consumers and stand out in the e-commerce market, there is a tendency to maintain a certain level of satisfaction ([Karim, 2013](#)).

E-commerce, it was a new purchase behavior for Malaysians. E-commerce is defined as customers visiting web stores with the access of internet and purchase

the products or services from a seller immediately through the internet ([Vipin Jain,2021](#)). With the advent of e-commerce, we can purchase goods easily by tapping our fingertip on the device. According to [Simon Kemp \(2022\)](#), there are 66.6 percent of Malaysians purchase goods or services online weekly. [Department of Statistics Malaysia \(2021\)](#) found out the income of e-commerce in Malaysia are showing an upping trend and increase about 42.42 percent from RM 195.9 billion in Quarter 1 2020 to RM279 Billion in Quarter 3 2021. The report of Department of Statistics Malaysia had proofed the influence of e-commerce are not only created a new purchase behavior for citizen Malaysia but it also became an important sector towards Malaysia's economy.

According to ([S. Praveen, 2015](#)), online shopping is kind of similar as the customers purchase the products or services at a physical store and it called business to consumer (B2C). Other than that, a business purchases the products or services from another business, the process is called business to business (B2B). Higher levels of education and personal income are often associated with more favourable opinions about online shopping. Exposure to technology increases the possibility that consumers will develop favorable attitudes about new commerce channels. Many people prefer to shop online since it is convenient.

1.2 Problem Statement

Nowadays, the cases about E-commerce fraud have been getting serious and it shows upping trend for the E-commerce fraud cases since 2018. [Kah Boon.L\(2021\)](#) finds out security is an important content to achieve customer satisfaction. The essential elements of customers purchasing goods or services online are safety of trade and the protection of personal information. The trust and satisfaction of customers will be destroyed by hackers who can create fake content and cause the customer to trust and purchase the products.

[E-Commerce Consumers Survey 2018](#) stated that more than half of online shoppers which is 53.4 percent out of 2400 respondents are care about the online shopping fraud. There are the threats concerned by the respondents which are cards fraudulent, trust concern, fake online retailers, bank details theft, and identity theft. Among those threats,

the first 3 concern areas by the respondents were cards fraudulent, trust concerns, and fake online retailers. In addition, 25 percent of the respondents did not perform online transactions due to their concerns about security and privacy.

[Majlis Keselamatan Malaysia \(MKN\)](#) had listed the Cybercrime Statistics by offenses from Royal Malaysia Police the second higher cybercrime was e-commerce fraud. The number of e-commerce fraud cases in 2018 was 3,325 and it had increased to 3,520 cases in 2019. According to this government article, lack of awareness may be a main factor for most of the victims in fraud cases. Malaysia also facing a lack of workforce to ensure cyber security. It was a critical reason the e-commerce fraud case increased and security was important to e-commerce.

Inspector-General of Police Datuk Seri Acryl Sani Abdullah Sani said that the online shopping fraud cases in 2019 was 3,520 cases and it had increased to 5,846 cases in 2020. For the first 10 months in 2021, the reported cases had risen to 8,162 cases. Acryl Sani was worried about the rise of online shopping fraud cases because the number of cases hasn't included other related scams such as parcel and love scams. He also said the current number of online shopping fraud cases may not be accurate because some of the consumers may not report it due to a small amount of losses ([Kalbana Perimbanayagam, 2021](#)). Bukit Aman Commercial Crime Investigation Department (CCID) assistant director (telecommunications criminal investigation) Supt Rozeni Ismail from [Kementerian Komunikasi dan Multimedia Malaysia \(KKMM\)](#) said some of the victims never heard or knew the information about the fraud case. There are 1,500 suspicious websites have been blocked by the Malaysian Communications and Multimedia Commission (MCMC) until 10 March 2021.

1.3 Research Questions

Based on the explanation about the background of the study and problem statement, the present research aims to answer three (3) questions linked to the relationship between factor affect youth customer satisfaction towards e-commerce Malaysia.

1. What are the factors will affect the youth customer satisfaction in e-Commerce Malaysia?
2. Do the youth customer satisfaction have a positive effect to e-Commerce Malaysia?

3. To what extent do the youth customer satisfaction impact E-commerce Malaysia?

1.4 Research Objectives

In guiding the intent and direction of this study, the following research objectives are formulated:

1. To determine the factor which will affect the youth customer satisfaction on E-Commerce Malaysia.
2. To analyze the relationship between the youth customer satisfaction and E-Commerce Malaysia.
3. To examine the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia.

1.5 Significant of the Study

Since the appearance of e-commerce had become popular in Malaysia, there is a lot of e-commerce websites launched in Malaysia such as Shopee- Lazada, Mudah.my, ZALORA and so on. Customer satisfaction is becoming more important for every e-commerce website and online seller to retain existing customers or attract new customers. Therefore, this study aims to identify the factor affect youth customer satisfaction towards online e-commerce Malaysia.

By identify these factors affect youth customer satisfaction towards e-commerce Malaysia, this study contributes to understand better the factor influence customer satisfaction. Furthermore, the result can help online sellers have a better understanding about customer satisfaction and improve their business by having their own strategies.

1.6 Structure of the Thesis

This thesis is structured into five themed chapters.

“Chapter One has explained briefly about the definition about the keyword which have related to the study, factor affect youth customer satisfaction towards e-commerce Malaysia. This chapter also focus on the explanation about the popular of internet and important of e-commerce in Malaysia. In addition, this chapter presented the research questions and objectives in addition to presenting the aim of the study and research implications.”

“Chapter Two presents the literature review which is SERVQUAL research framework by PARASURAMAN. Also present own research framework by add one new variable which is security.”

“Chapter 3 provides an overview of the methodology used in this study. In this chapter, it describes the research design and research hypotheses which is the relationships between independent variables and dependent variable. In addition, the procedures used to implement the structure in the theoretical model of the study. Finally, appropriate statistical methods for data analysis are explained in detail.”

“

discusses the results and discussion of this study according to the chosen statistical method. The discussion starts with the presentation of descriptive statistics and followed by factor analysis. Reliability analysis of variables is presented, then correlation and regression analysis and correlation results are discussed.”

“Chapter Five presents the conclusions and implications of this study. In this chapter, it also discussing the contributions of the findings, along with limitations of the research. Finally, this study provides the suggestions for future research, and concluding remarks.”

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

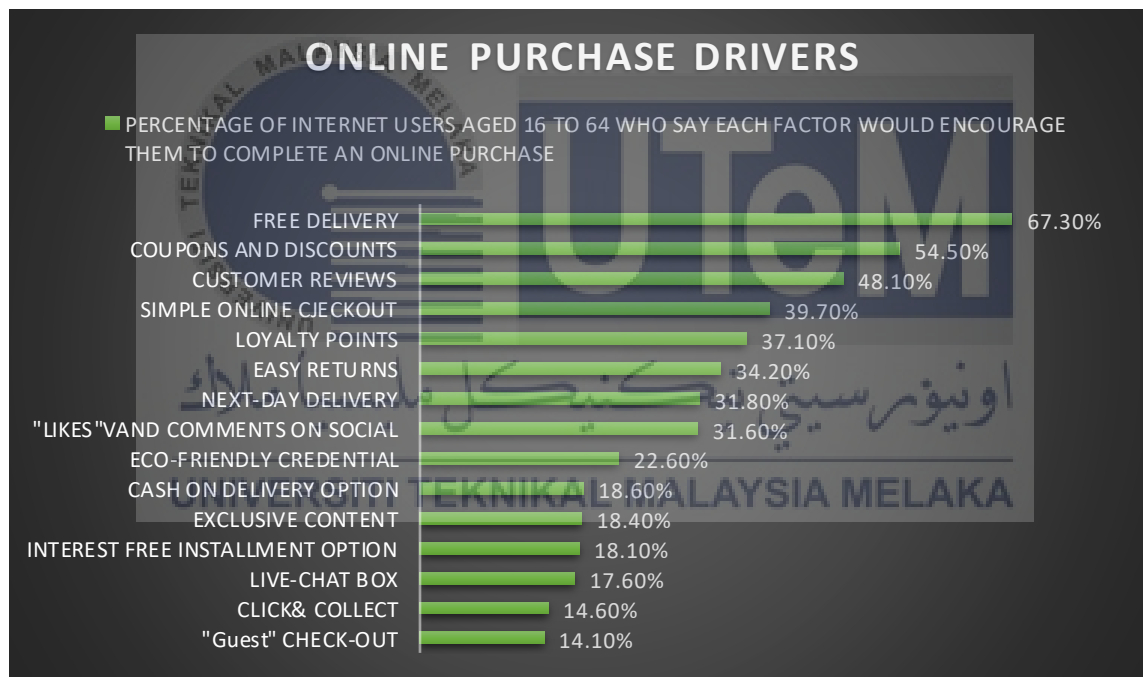
This chapter explain the relevant of the topic in this research to meet the objectives of this research. In this chapter also discuss the chosen theory, which is SERVQUAL Model by Parasuraman, Zeithaml and Berry and the selected independent and dependent variables. The end of this chapter presents the research framework and hypotheses.

2.2 Customer Satisfaction

Based on [Oliver \(1980\)](#), customer satisfaction had been defined as a customer's rating towards a company by taking into consideration the needs and expectations of customers. Even though customer satisfaction is an important element to measure a success of an organization, satisfaction also important in the customer competitiveness to differentiate between other company. Customer satisfaction had been proofed as a key role to ensure a company to continue maintain own position in the marketplace especially for the company which are more focusing on the competitiveness of customers ([Nawi, 2012](#)). As a result, customer satisfaction as one of the important things should be considered for a company. In addition, the research of [Mascarenhas \(2018\)](#) said customer feel satisfied and it was called as customer satisfaction when a company fulfill the customer needs. So, customer satisfaction is a factor which will influence revenue and productivity of a company and it also determine the future of a company. Furthermore, [Carlson and O'Cass \(2010\)](#) stated that companies can gain more competitive advantage from the customer satisfaction. It means the feelings of the customers after purchase the products or services and the customer expectation towards products or services will be defined as satisfaction. The customers will feel unsatisfied and tell another such as friends and families about the worse experience when a company didn't achieve the customer expectation ([Lang, 2011](#)).

However, customer satisfaction in the marketing terms defined as how a company provide their products or services to achieve the customer's needs and expectation ([S. Praveen, 2015](#)). Customer satisfaction is important for marketers and business owners. This is because customer satisfaction is an important metric to manage and improve their business. Without the high customer satisfaction, the profit margin will be low and hard to develop new products or services. In his studies, a company which have high customer satisfaction can generate about 18 times of revenue than a company which is low customer satisfaction. As a result, customer satisfaction had a huge influence towards a business either physical store or online business.

Figure 2.1: Online Purchase Drivers in 2022



Based on [Simon Kemp \(2022\)](#), the top three of online purchase driver are free delivery, coupons and discounts, and customer reviews. Especially free delivery is very attractive to online shoppers.

According to (S, Praveen, 2015), a satisfied customer will introduce the products or services to their family and friends and it will increase the sales of the company. Unsatisfied customer will influence the growth and the profit of the company. Negative review from the customers has more influence on a business and it is out of expect from

owner. Next is about advertisement, The company always spend a lot of money for advertisement. Word of mouth is a best way from the customers promote the products or services without any cost. The company must evaluate the customers about the needs and the complaint through the questionnaire survey and solve the problem immediately. According to Li & Zhang (2002), most of the consumers will have expectations towards the products, vendor, services, and quality of the website before make purchase through online shopping. All the expectations will influence the customer satisfaction and intentions of the consumers towards online shopping.

2.3 Young Shopper

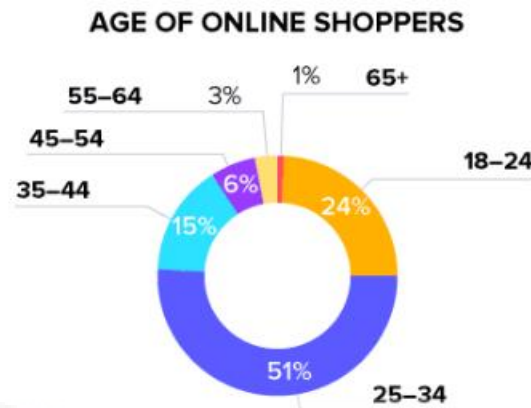
Based on the research of [Mishra & Ayatham, 2017](#), young shoppers had been targeted in this study. This is because more than half of Malaysian population had responded positively and had a positive image towards online shopping in the previous 3 years. Most of the Malaysians populations who had responded positively are belongs to youth shopper who are overwhelmed with social media website such as Facebook, Instagram, and WhatsApp. This age group had been influenced by the huge impact of the increase of buying power in Malaysia and they assume themselves can adopt the new technology immediately.

In addition, most of the company believe consumers will prefer for social shopping compared to traditional shopping. This is because it had let the consumers feel satisfied and convenience especially view and purchase the products and service with a click. Company also believe consumers will always purchase their products if they can fulfill the customer satisfaction and customer loyalty ([Han et al., 2018](#)).

According to [Nazaria et al., \(2020\)](#), there are a lot of young persons in Malaysia able to accept and adopt the new technology in industry. This is because the median age of Malaysians for male and female was around 25 to 26 years old. Malaysians have a wonderful potential to adopt e-commerce because to the influence of young people on social media. Many Malaysians are computer savvy and able to speak in a variety of

languages, including Malay, English, Chinese, Tamil, and other languages, allowing them to easily interact with individuals from all over the world.

Figure 2.2: Age of Online Shopper in 2018



Based on [ecinsider report \(2019\)](#), there are 51% which means more than half of the online shoppers in Malaysia are the persons between the ages from 25 to 34 years old. The second higher quarter was 24% which is people from 18 to 24 years old. As a result, we can know that there is a strong purchase power around 75% from the young shoppers in Malaysia. Based on the research of [Kim & Ammeter \(2008\)](#), young people can proceed the website information up to five times quicker than older people because young people are familiar with e-commerce.

2.4 E-commerce

There are different definition and understanding towards e-commerce, some of them include electronic data interchange (EDI), electronic funds transfer (EFT) and all credit/debit activities ([Collecchia, 1999](#)). The different definition towards e-commerce is because the meaning itself are comes from the understanding of researcher without rely on the elements of e-commerce. There are some researchers such as [Turban et al., 2002](#) had defined e-commerce is a process of purchasing and selling products or services by using the Internet. In addition ([Collecchia, 1999](#)) state that the meaning of e-commerce can be different depend on three key elements which is activities or transactions, applications, and

communication networks. In simple words, the meaning of e-commerce must include the features which is cover the issues of transforming the economic activities, focusing on certain technologies, and not only justify the recent attention given by policymakers. Therefore, [\(Collecchia, 1999\)](#) will asked by own self which is three before making any definition. For example, why we want to measure, what do we want to measure and what can we measure.

Based on the research of [Whiteley \(2001\)](#), e-commerce had been defined as the provision of information and purchasing and selling products or services among business stakeholders by the using of Information System, Information Technology or Information and Communication Technologies. One of the impacts of e-commerce is internet-based technology that provides the widest network of information systems. Other than that, [Doernberg et al \(2001\)](#) had another understanding about e-commerce. E-commerce is a business activity by using a computer include online trading of products or services, electronic fund transfers, online trading financial instruments, electronic data exchanges between companies and electronic data exchanges within a company.

The scope of e-commerce had extended from simple web presence to sharing business processes connecting different organization. Nowadays, the World Wide Web (“www” or simply “the web”) has become a mainstream because it had moved across its original presence. It has caused the rapid growth of the web because of the organization start to sell the web-based products and services and it has required for e-commerce application [\(Gaedke and Turowski 2000\)](#).

2.5 Customer Trust

With the advent of e-commerce, the concept of trust becomes complex. According to several previous study (Corritore et al., 2003; Grabner Krauter & Kaluscha, 2003; Mittal & Kamakura, 2001), the researchers believe that further study on various forms of trust in online environments is needed. Nevertheless, each of the field have examines trust from its own distinct perspective and there are literally thousands of definitions of trust such as from the economic field, finance field, marketing field , personality, and social psychology field. Based on several previous study Grabner Krauter & Kaluscha, 2003;

McKnight & Chervany, 2001), trust was hard to define and become a difficult concept. According to the study from Ling et al (2010), e-commerce is seen to be riskier and more dangerous. Hence, trust is a important things in e-commerce. To put it another way, trust is the assurance a person has in anything coming from someone else and is based on that person's sense of integrity, their approaches, and their abilities (Madjid et al(2018).

Customer trust is commonly defined as the desire to rely on an exchange partner in whom one has faith in a vulnerable scenario (Moorman et al., 1992). Based on the research from Mayer et al (1995), online store trust has been defined as a consumer's readiness to depend on the seller and take action in situations when doing so puts the consumer at risk of being exploited by the seller. According to several studies (Doney & Canon, 1997; Ganesan, 1994; Ganesan & Hess, 1997; Shankar, Urban et al., 2002), There are two important underlying elements of online trust which are credibility which means the buyer's belief in the expertise of seller to do the job effectively and benevolence which means the buyer's belief in the seller's positive intention.

In addition, consumers trust in online shopping has been modelled by Lee and Turban (2001) using four groups of factors as antecedents:

- (1) Online merchant trustworthiness, which includes perceptions of the merchant's ability, integrity, and benevolence;
- (2) Online shopping medium trustworthiness, based on perceptions of the Internet merchant's technical competence and performance level (e.g., reliability, speed, and availability), as well as understanding of the Internet shopping medium;
- (3) Contextual factors such as the perceptions of effectiveness of third-party certification and public key security infrastructure systems; and
- (4) Other factors, such as company size and demographic variables.

Lastly, Shopee as a good example of e-commerce platform in Malaysia. The good reputation of Shopee come from the innovation to keep the consumers trusted. Other than that, Shopee was mainly focused on the development of mobile application. As a result, Shopee had provide a good shopping experience for the customers and feel satisfied and

trusted by their customers. Shopee had proof that customer trust is an important element to fulfill the customer satisfaction.

2.6 Customer Loyalty

[\(Keller,1993\)](#) defined loyalty as repetitive purchase behavior exhibited over some undefined time frame driven by a good disposition toward the subject such as attitudinal and conduct perspectives. However, [Jacoby and Chestnut \(1978\)](#) argued the reliability of consolidated conceptualization who criticized the social part of reliability explore which is focusing on continue purchasing [\(Kim et al., 2009\)](#). Furthermore, some of shopping website such as Lazada, Shopee and Zalora want to encourage online social shopping by empower user to find and follow items they interest and share the shopping tips with friends and family [\(Yang et al., 2015\)](#). Based on the research of [Pavlou \(2002\)](#), better feedback from buyer will prompt trust. So, the customers will purchase more items and again from the specific website if they assume the website can be trusted. The website will protect the personal information of buyer from the seller with bad reputation [\(Tsai & Yeh, 2010\)](#).

According to the previous study (Baldinger & Robinson, 1996; Gremler & Brown, 1999; Hart & Johnson, 1999; Reichheld & Sasser, 1990; Zeithaml et al., 1996), loyal consumers remain longer, cost less to serve, generate greater profits, buy more across product lines, disseminate positive word-of-mouth, are less price sensitive, and are prepared to pay a premium to do business with their favorite merchants. As a result, customer loyalty has emerged as a critical determinant in a company's profitability and long-term success (e.g., Bowen & Shoemaker, 1998; Dowling & Uncles, 1997; Reichheld, 1996; Reichheld et al., 2000). Customer loyalty is a good result in a long-term for a business if the customer has high customer satisfaction towards the products or services. The customers will continue to purchase the products or services again.

2.7 Service Quality

According to the concept of service quality developed by [Parasuraman et al., \(1988\)](#), service quality mainly used in the comparison of the excellence service encounters by the customers. Based on the research of [Bitner \(1990\)](#), service quality had been defined as the

view from the customers towards the service provider and the quality of the service, and it often will be considered as the overall impression of the company [Parasuraman et al., \(1988\)](#). Based on the several previous study, the definition of service quality had covered several features and one of the features from them is an attitude towards the service provider from the previous encounters ([Bitner, 1990](#); [Parasuraman et al., \(1988\)](#)).

According to [Gronroos, 1990](#), the content of “attitude” includes the quality of output and process. Meanwhile, other researchers had defined quality of output as what the customers actually received and quality of process as the method of deliver service. Nevertheless, the quality of output are difficult to measure because service tend to have more credibility and experience ([Rushton and Carson, 1985](#)). This situation had lead to the customers evaluated the quality of process during the delivery ([Swartz and Brown, 1989](#)). So, the evaluation of customers includes quality of output and quality of process. Those of the components have huge influence to the future expectation of service provider but the actual impact may different depend on the types of service ([Bitner, 1990](#)). Service quality had been briefly describing as the output and process quality of the service from the previous encounters. As a result, the evaluation of the customers towards the products was depend on the extent is tangible or intangible ([Rushton and Carson, 1985](#)). In the context of e-commerce, service quality has been defined as the evaluation of the customers to wards the web-based products or services in the virtual marketplace ([Santos, 2003](#)).

2.8 SERVQUAL Theory

In early 1980s, [Parasuraman et al., \(1988\)](#) had developed the SERVQUAL. This theory was one of the famous theories to measure service quality in customer satisfaction. At the first, there are ten dimensions applied in SERVQUAL Theory (reliability, tangibles, competence, responsiveness, security, courtesy, communication, understanding, access and credibility) [Yousapronpaiboon \(2014\)](#). Ten dimensions had been reduced to five used to measure the service quality which are tangible, reliability, responsiveness, assurance, and empathy ([Parasuraman, 1985](#)). [Crompton \(1989\)](#) had discussed about the SERVQUAL Theory and proofed the validity and reliability of SERVQUAL Theory. [Parasuraman et al \(1991\)](#) finds out SERVQUAL Theory is widely used in the measurement of service quality.

[Devaraj et al. \(2002\)](#) stated that SERVQUAL Theory also used in the measurement of service quality in e-commerce. There are some of the related studies have applied the SERVQUAL Model and used for the measurement in their study such as web-based service ([Kuo, 2003](#)), internet retail ([Barnes, 2001](#)), and electronic banking ([Zhu et al., 2002](#)).

Nevertheless, web-based services differ from traditional brick-and-mortar customer service, which has become a challenge to measure the service quality of web-based services ([Li et al, 2002](#)). [Parasuraman and Grewal \(2000\)](#) had gave the suggestion there is the need to study "whether the definition and relative importance of SERVQUAL dimensions change when customers interact with technology rather than service personnel".

2.8.1 Reliability

Reliability means the capacity of a service provider to fulfill the promised services honestly and consistently ([Blery et al., 2009](#)). Customers desire dependable services they can trust on ([Khan et al., 2014](#)). In addition, reliability is a measurement of the company in the terms of performance and dependable ([Choy et al., 2013](#)). Based on the research of [Hennayake \(2017\)](#), reliability had been understand as the ability of a company provide their service as promised. For example, problem solving, pricing and after sell service. The previous study shows that reliability has positive influence towards customer satisfaction ([Mahfooz, 2014](#); [George & Kumar, 2014](#); [Das et al., 2010](#); [Jamal & Anastasiadou, 2009](#)). For example, the customer satisfaction will increase when a company can keep the promise of customers ([Mahfooz, 2014](#); [Yuen & Chan, 2010](#)).

H1: Reliability have positive relationship between customer satisfaction.

H0: Reliability don't have positive relationship between customer satisfaction.

2.8.2 Responsiveness

In the research of [Gulc \(2017\)](#), responsiveness defined as the capacity to respond quickly and provide feedback when consumers have an issue with the organization. Responsiveness as an important factor in service quality by identifies the responsiveness

of staff towards the requests from customers and their willingness to fix the problem. If the consumers keep waiting without any reason, they will doubt about the quality of service and show negative perception ([Millas, 2013](#)). The one who could solve the problem and react immediately about the problem or issues from consumers can create and improve a positive perception of quality ([Firdous, 2017](#)). Responsiveness has the effect will influence the customer perception. As a result, responsive is an important factor will influence the customer satisfaction.

H2: Responsiveness have positive relationship between customer satisfaction.

H0: Responsiveness don't have positive relationship between customer satisfaction.

2.8.3 Assurance

According to (Halil Zaim et al., 2010), assurance defined as the knowledge of service provider and ability to proof their confidence and service can be trust to consumers. In the research of (Parasuraman et al., 1985), assurance had include the security and privacy perceived by consumers. Based on the literature from service quality, trust can be understand as 'trust in the service itself'. According to Ma (2012); Madu and Madu (2002), an organization should ensure their employees well training and understand their own task. Employees should always show their kindness and patience to fulfill the customer's needs such as questions from the customers and customer's feedback. This is because the customers will change their choice to another company if they feel unsatisfied to the current company service. According to Goh, Kow, Lee, Loh and Sam (2013), a experienced employees will provide a fast service to their customers. This is one of the ways to shows their assurance to customers. The customers will feel satisfied and trust towards our employees if they able to show their ability and confidence to the customers. It can help the employees to build a relationships with the customers (Baruah, Nath, & Bora, 2015; Parasuraman, Zeithaml & Berry, 1988).

According to the study of Phiri and Mcwabe (2013); Cook (2000), assurance is the most important element in service quality. In fact, customers will choose to deal with the company or person they trust or believe. Assurance have positive influence towards

customer satisfaction and it can be verified from several previous study which is Phan (2015) and Shanka (2012).

H3: Assurance have positive relationship between customer satisfaction.

H0: Assurance don't have positive relationship between customer satisfaction.

2.8.4 Empathy

According to (Blery et al., 2009), empathy refers to a service provider's capacity to effectively resolve these issues by comprehending the customer's concerns and demand. Felix (2017) had stated in his own research, empathy represented a service provider's willingness to treat consumers with kindness and personalized attention. Empathy includes physical and social aspects such as making it easy to reach consumers, communicating with them in suitable language, listening to their criticism, and trying to understand their preferences and wants.

In addition, (Qadri, 2015) stated that empathy also can defined as a company understand the customer's needs and wants and give attention to the customers. At the same time, Nautiyal (2014) stated that empathy shows that a employee was kindness, helpful and able to understand the customer's needs. Employees who are cares and give attention to the customers will let their customers feels satisfied and value. In summary, the empathy of a employee will help the company to retain the customers and deal with the customers.

According to the previous studies, empathy can be mention as one of the important features that will affect the customers satisfaction and customer loyalty. The customer satisfaction level will increase if the employees can provide good service to their customer (Goh, Kaw, Lee, Loh & Sam, 2013; Yavas, Bilgin, & Shemwell, 1997; Ladhari, Ladhari, & Morales, 2011).

H4: Empathy have positive relationship between customer satisfaction.

H0: Empathy don't have positive relationship between customer satisfaction.

2.8.5 Tangibles

Tangibles defined as the things which have the appearance in physical form and it can be see and touch such as shape and color (Khan et al., 2014). In the research (Blery et al., 2009), tangible in the terms of service quality defined as Information and Communications Technology (ICT) equipment, facilities and their appearance in physical form (ambience, lighting, air-conditioning, color of wall, shape of building); and most important is provide the service for the staff of the organization. Based on the research of Zeithaml et al., (2000), the design and usability of website are the important things as the tangible elements of an online store. According to Muda & Muda (2002), provide a website that is easy to use and understand is good start to fulfill customer satisfaction. There are some of the key elements will affect the usability of website which are organization, download speed and website's search function (Parasuraman et al., 2005). According to the previous study Jeong et al., (2010), the author had apply the variable which is tangible in his study and it had a positive influence on customer satisfaction. As a dimensions of service quality, tangible was important in increase the customer satisfaction and loyalty.

H5: Tangibles have positive relationship between customer satisfaction.

H0: Tangibles don't have positive relationship between customer satisfaction.

2.8.6 Security

Security defined as the capacity of website to protect and avoid the customer information from the being misused during an electronic transaction ([Yoo & Donthu, 2001](#) ; [Parasuraman et al., 2005](#)). The first portion of security is concerned with data and transaction security, while the second part is concerned with user authentication ([Guo et al., 2012](#)). According to previous study, security is one of the important elements influence the customers to visit the website and make purchases ([Ranganathan & Ganapathy, 2002](#); [Yoo & Donthu, 2001](#)).

H6: Security have positive relationship between customer satisfaction.

H0: Security don't have positive relationship between customer satisfaction.

2.9 Research Framework

From the constructs of the SERVQUAL model and the addition of security, a framework is developed as the basis for this research, as a picture showed in Figure 2.1. The five independent variable of SERVQUAL are Reliability, Responsiveness, Assurance, Empathy, Tangibles, while security is an additional independent variable that is added in this research.

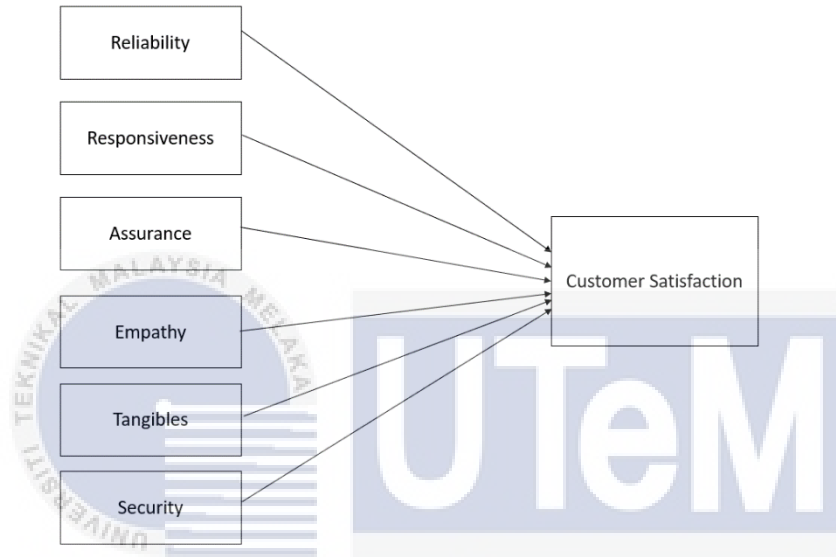


Figure 2.3: Proposed Research Framework of Factor Affecting Youth Customer Satisfaction towards E-commerce Malaysia

2.10 Summary

In this chapter, the researcher had explained the relevant of this topic such as customer satisfaction, young shopper, e-commerce, and customer loyalty, service quality. From the literature, there are five dimensions of SERVQUAL model in addition to the security dimension used as the independent variables, while the customer satisfaction is the dependent variable. This chapter had proposed five hypotheses to achieve the research objectives. In the next chapter, there are several things will be discussed which are research design, research instruments, population, sampling, and the analysis technique utilized.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the research is aimed to identify the factor affecting youth customer satisfaction towards e-commerce Malaysia. This chapter also discuss the methodology that was chosen to use in this study. This chapter had divided into several parts which are research design, data collection, research instruments, population and sampling, and data analysis procedure.”

3.2 Research design

In this research, descriptive study had been used to identify and describe the characteristics of the variables. Based on the research of [Sekaran & Bougie \(2010\)](#), A descriptive study's purpose is to provide the researcher with a profile or to characterize significant characteristics of the phenomena of interest from the standpoint of an individual, organization, or industry, or any other viewpoint.

The hypothesis has been developed to understand the relationship between independent variables and dependent variables which are reliability, responsiveness, assurance, tangible, empathy, and security between customers satisfaction. About the data collection method, the cross-sectional method has been chosen to apply in this research. This is because the data collection would be conducted only once. The chosen research design is descriptive research, and casual research and the quantitative method had been applied in this research.

3.3 Operationalization of constructs

In this research, quantitative method had been used by doing a survey to collect the information from the respondents. The questionnaire is an efficient method for data

collection to test research theory. Questionnaires able to send to respondents in several ways which are administered personally, send the mail to respondents and send in digital copy ([Sekaran and Bougie, 2010](#)).

Although the questionnaire is an efficient data collection method, this method also has advantages and disadvantages as survey tools. There are several advantages include Greater guarantee of anonymity, no interview bias, and the possibility to cover a broader range of topics. Nevertheless, there are several drawbacks to utilizing questionnaires as survey instruments, such as no control over the date of response, the possibility of questions going unanswered, and a poor response rate ([Sekaran and Bougie, 2010](#)).

To get comprehensive information on Reliability, Responsiveness, Assurance, Empathy, Tangibles, and security in this study, the questions in the questionnaire were rated on a five-point Likert scale. The scale ran from 1 to 5, with 1 denoting "Strongly Disagree" and 5 denoting "Strongly Agree." The questionnaire was divided into three sections, as indicated in Table 3.3.1, Table 3.3.2 and Table 3.3.3: Section A, Section B, and Section C. Section A included demographic questions aimed at learning more about the respondents' backgrounds. Section B was the questions regarding the identification of factors. Section C was the questions regarding to customer satisfaction.

3.3.1 Section A: Background of the respondents

Demographic profile of respondents

No.	Items
1	Gender
2	Please indicate your age
3	Please indicate your education level
4	Please indicate your occupation

3.3.2 Section B: SERVQUAL factors

No.	Items	Sources
Reliability		

1	Providing services as promised.	Yonghai Hou (2005)
2	Dependability in handling customers' service problems.	
3	Performing services right the first time.	
4	Providing services at the promised time.	
Responsiveness		
1	Keeping customers informed about when services will be performed.	Yonghai Hou (2005)
2	Providing prompt delivery.	
3	When I have a problem, the online seller shows a sincere interest in solving it quickly.	
4	Readiness to respond to customers' requests.	
Assurance		
1	The online seller has the knowledge to answer customer questions.	Yonghai Hou (2005)
2	The online seller allows for ease of changing or canceling orders or returns.	
3	The online seller instills confidence in customers.	
4	I feel safe in transactions with the online retailer.	
Empathy		
1	The online seller gives customers individual attention.	Yonghai Hou (2005)
2	I feel that my personal needs have been met when visiting the online seller's online shop.	
3	The online seller's online shop provides me with information and products according to my preferences	
4	The online seller understands the needs of the customers.	
Tangibles		

1	The online seller's Web site is visually appealing	Yonghai Hou (2005)
2	The online seller's Web site has an appropriate style of design for its site type.	
3	The information of the online seller's Web site is valuable to make purchase decision	
4	The information of the online seller's Web site is useful for shopping needs	
Security		
1	I feel my privacy was being protected by this site .	Syed Shah Alam (2020)
2	The website provides adequate security features.	
3	The online shop able to stop the unauthorize transaction immediately.	
4	The website helps the users to avoid the scammer by launch out the safety tips.	

3.3.3 Section C: Customer Satisfaction

Customer Satisfaction		
1	I think I did the right thing when I decided to use this online seller for making my purchase.	Yonghai Hou (2005)
2	My choice to use this online seller was a wise one.	
3	Based on all my experience with online seller, I feel very satisfied.	
4	Overall, I am satisfied with the decision to use the online seller.	

3.4 Population and Sampling

This study required a public level of analysis; hence Malacca youth residents which is the respondents between 15 to 30 years were chosen in this study. The researcher had

chosen Malacca as the state to collect data because of the researcher study at Universiti Teknikal Malaysia Melaka. It was more convenience for the researcher collect the data since the researcher study and stay at Malacca. Based on the report of [Department of Statistics Malaysia \(DOSM\)](#), there are about 930,000 residences in Malacca. However, researcher face the challenge to get the accurate number of the Malacca youth residence. So, the researcher had got the latest data which is 2020 from the Department of Statistics Malaysia (DOSM) as an example of sample size to consider in this study. According to the table from [Krejcie and Morgan \(1970\)](#), 382 is the sample size of Malacca youth residences needed for a population of 930,000.

This study employed a convenience sampling technique, which is a sort of nonrandom or nonprobability sampling in which study participants meet specified criteria, such as proximity to the study site, ease of access, willingness to participate, or availability at a given time. Convenience sampling is sometimes known as accidental or haphazard sampling.

3.5 Data Analysis Procedure

The first step in the data analysis process was to determine the sample size. According to [Roscoe \(1975\)](#), "for most studies, a sample size of greater than 30 but less than 500 is the most optimal number."

The model was then examined for data dependability and validity. The correlations of the relationships between the independent factors and the dependent variable were measured as part of the data analysis. It also showed the direction, intensity, and significance of all the variables in this study's bivariate correlations. The regression analysis was the final phase in the data analysis, and it determined the importance of the predictors of variables.

3.5.1 Reliability and Validity of Research Instruments

When attempting to measure an assessment, it is critical that the assessment be devoid of bias and distortion for the assessment process to be completely reliable.

Reliability and validity are two fundamental concepts used to describe and quantify bias and distortion.

Validity refers to the ability of a research tool to measure what it was designed to assess ([Heale and Twycross, 2015](#)). It's also the amount to which an instrument does what it's supposed to do. Because it is extremely unusual, if not impossible, for an instrument to be 100 percent valid, validity is usually expressed in degrees. Validation is a procedure that involves gathering and evaluating data in order to determine an instrument's correctness. External and internal validity are considered in the overall study design. External validity relates to the capacity of the findings to be generalized, whereas internal validity refers to the design's ability to test the hypotheses.

Reliability, on the other hand, refers to the consistency with which an instrument measures what it is supposed to measure ([Heale and Twycross, 2015](#)). Test-retest, alternate forms, split halves, and Cronbach's Alpha are the four most used procedures for testing reliability, according to ([Sekaran and Bougie, 2010](#)). The most acceptable approach is Cronbach's Alpha, which is a fully adequate measure of internal dependability with a best number of larger than 0.70. The Statistical Package for the Social Sciences (SPSS) v.21.0 was used to analyze the data.

3.5.2 Factor Analysis

Exploratory factor analysis (EFA) was performed to assess pilot test responses. Field (2005) explained that EFA should be done for three reasons: (1) to gain a preliminary understanding of the structure of what was learned as defined by the participants. For example, the questions in the questionnaire are conceptually grouped; (2) assess the reliability of the questionnaire and obtain information on how to reduce the number of questions in the questionnaire. As explained, EFA is "a multivariate statistical technique that analyzes data from a relatively large set of variables and produces a smaller set of factors that are linear combinations of the original variables such that the factor set captures as much as possible Datasets with much information" ([Parasuraman et al., 1991](#)).

When doing the EFA, two main procedures must be followed: extraction and rotation. The extraction approach is used to investigate the factors that impact several different variables ([Miller et al., 2002](#)). According to Luck and Rubin (1987), many researchers utilize principal component analysis (PCA) to examine variables since it is a reliable and error-free procedure.

The loading pattern is rotated after extraction to make it simpler to understand. The researcher used PCA and the orthogonal model with Varimax rotation to accomplish the EFA in this study. The orthogonal rotation, as opposed to the oblique rotation, can provide more generalizability and replicability power. Furthermore, because the variables are unrelated, it is less challenging (Tabachnick and Fidell, 2001)."

3.5.3 Correlation Analysis

According to [Pearson \(2009\)](#), the Pearson correlation matrix represents the direction, strength, and significance of bivariate relationships between all variables in a study measured at the interval or ratio level. In the current study, this step was used to determine which independent variables had a positive or negative relationship with the dependent variable and revealed important factors affect youth customer satisfaction towards e-commerce Malaysia.

Pearson's r-correlation is the most widely used correlation statistic for measuring the degree of relationship between linearly correlated variables and was chosen for analysis of correlations between independent and dependent variables. For the purposes of this study, the researchers intended to measure the relationship of these factors to intention and used Pearson's correlation to measure the degree of the relationship between the two.

3.5.4 Multiple Regression Analysis

"To see if the constructs were positively significant predictors, multiple regression analysis was used. A typical multiple regression was used in the initial analysis, with all six construct inputs functioning as independent variables and customer satisfaction as the dependent variable. The findings were utilized to put the hypothesized causal link discovered in this study to the test.

Multiple regression was a good choice for this study since it allows you to see how far an outcome variable can be predicted when all of the variables are known. When all predictors are known, the approach also allows you to see how far an outcome variable can be predicted (Vogt, 2007).

3.6 Summary

As a result, this chapter had explained the research methodology used in this study. This research also applied the quantitative method to identify the factors affect youth customer satisfaction towards e-commerce Malaysia. In addition, this chapter also discussed about the operationalization of each variable applied in this study to create the research instruments. Other than that, this chapter also specified the target population and respondents which is youth residence Malacca from Malaysia. Finally, this chapter highlighted the analysis used in this study, which included reliability analysis, multiple regressions, and correlation analysis. The results of the analysis will present in the next chapter, which is Chapter 4.



CHAPTER 4

RESULT AND DISCUSSION

4.1 Introduction

In this chapter, the quantitative approach had been used by the researcher to conduct the result of the research. The range of data collection included the youth residents around the Malacca area. This research will explore to determine the factor which will affect the youth customer satisfaction on E-Commerce Malaysia, and then analyze the relationship between the youth customer satisfaction and E-Commerce Malaysia and finally examine the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia.

Next, hypothesis testing, Pearson Correlation and Multiple Regression Testing will be used to conduct the data analysis. The data analysis is tested based on 384 respondents at Malacca area with a questionnaire of 2 section which is Section A for demographic and Section B for SERVQUAL Factors such as Reliability, Responsiveness, Assurance, Empathy, Tangibles, Security and Customer Satisfaction.

After that, the researcher conducted a pilot test to test the validity of questionnaires survey by involving 30 respondents to ensure that there are no mistakes or errors occur in the questionnaires. It is necessary for the researcher to understand the potential error and harm in the questionnaire survey before proceeding to collect the real data. Some modification was made to ensure proper grammar and spelling. Cronbach's Alpha was recorded during pilot test.

4.2 Rate of Response

Throughout the collection of data, an online platform which is Google Form Survey had been used for data collection and the data are easier to collect compared to face-to-face distribution. The target respondents in this research are the youth residents in Malacca area. According to sample and population table by Krejcie and Morgan (1970), the sample needed for a population of more than 800, 000 in this research was 384. At the end of the data collection process, the researcher managed to obtain all the data needed.

4.3 Frequency Analysis

Frequency analysis was used to analyze the background of the respondents. The background of the respondents included questions on the respondents' which is gender, age, education level and occupation.

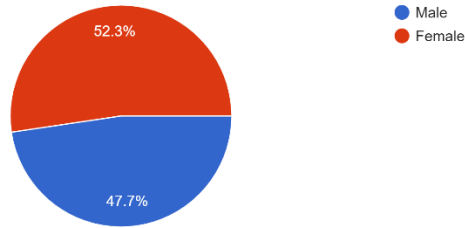
a) Gender

Table 4.3 shows the gender of the respondents. According to the results, 52.3% (or 200) of the respondents were female, and 47.7% (or 184) were male.

Table 4.1: Gender Analysis

Gender	Frequency	Percent
Male	184	47.7
Female	200	52.3
Total	384	100.0

Gender
384 responses



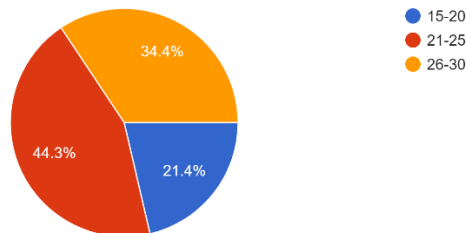
b) Age

Regarding the age group in the questionnaires, the respondents were categorized into three groups: “15 years to 20 years old”, “21 years to 25 years old” and “26 years to 30 years old”. According to Table 4.4, the highest number belongs to the “21 years to 25 years old” group which at 44.3% (or 170); the second highest number of age group is “26 years to 30 years old” which at 34.4% or 132 respondents; the lowest number of age group is “15 years to 20 years old” which at 21.4% or 82 respondents.

Table 4.2: Age of Respondents

Age	Frequency	Percent
15 years to 20 years old	82	21.4
21 years to 25 years old	170	44.3
26 years to 30 years old	132	34.4
Total	384	100.0

Age
384 responses



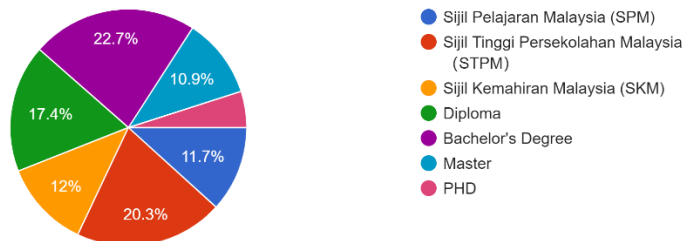
c) Education Level

According to Table 4.5, it shows the results of the education level of the respondents. The highest number of the respondents are Bachelor's Degree holder which is 22.7% (or 87) of the respondents; the second highest number of the respondents are STPM Holder which is 20.3% (or 78) of the respondents; the third highest number of the respondents are Diploma Holder which is 17.4% (or 67) of the respondents; the fourth highest number of the respondents are SKM Holder which is 12% (or 46) of the respondents; the fifth highest number of the respondents are SPM Holder which is 11.7% (or 45) of the respondents; the sixth highest number of the respondents are Master Holder which is 10.9% (or 42) of the respondents; Lastly, the lowest number of the respondents are PHD Holder which is 4.9% (or 19) of the respondents.

Table 4.3: Education Level among the Respondents

Education Level	Frequency	Percent
SPM	45	11.7
STPM	78	20.3
SKM	46	12
DIPLOMA	67	17.4
BACHELOR	87	22.7
MASTER	42	10.9
PHD	19	4.9
Total	384	100.0

Education Level
384 responses



d) Occupation

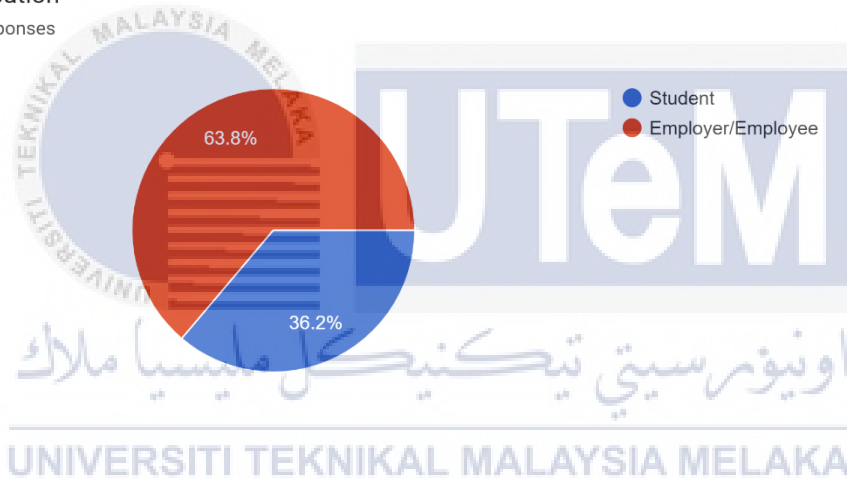
According to Table 4.6, the highest number of the respondents are employer or employee which is 63.8% (or 245) of the respondents; the lowest number of the respondents are students which is 36.2% (or 139) of the respondents.

Table 4.4: Occupation among the Respondents

Occupation	Frequency	Percent
Student	139	36.2
Employer/Employee	245	63.8
Total	384	100

Occupation

384 responses



4.4 Descriptive Analysis of Independent Variables

In this part, the researcher conducts descriptive statistics on each variable which is independent and dependent variables. Descriptive statistics may demonstrate how precisely the variables' dimensions are analyzed. The relationship between the mean and standard deviation will demonstrate how evenly distributed the data are around the mean value.

4.4.1 Reliability

According to Table 4.7, it shows the result of the descriptive analysis for REAL. The range of mean values for all items falls from 3.37 to 3.66. As a result, most of the respondents agree with the items in the REAL.

Table 4.5: Descriptive Analysis for Reliability

Items	Mean	Std. Deviation
REAL 1- Providing services as promised.	3.66	1.197
REAL2- Dependability in handling customers' service problems.	3.62	1.045
REAL 3- Performing services right the first time.	3.58	1.230
REAL 4- Providing services at the promised time.	3.37	1.266

4.4.2 Responsiveness

Table 4.8 shows the results about the descriptive analysis for RES. The mean values for the items in RES range from 3.27 to 3.50, which shows that respondents mostly agreed with the statements in the items of RES.

Table 4.6: Descriptive Analysis for Responsiveness

Items	Mean	Std. Deviation
RES 1- Keeping customers informed about when services will be performed.	3. 27	1. 291
RES 2- Providing prompt delivery.	3. 33	1. 238
RES 3- When I have a problem, the online seller shows a sincere interest in solving it quickly.	3. 48	1. 203
RES 4- Readiness to respond to customers' requests.	3. 50	1. 211

4.4.3 Assurance

Table 4.9 displays the results of the descriptive analysis for A. The result of the mean values of the variable range between 3. 41 to 3. 61. As a result, most of the respondents agree with the items in A.

Table 4.7: Descriptive Analysis for Assurance

Items	Mean	Std. Deviation
A1- The online seller has the knowledge to answer customer questions.	3. 61	1. 156
A2- The online seller allows for ease of changing or canceling orders or returns.	3. 45	1. 197
A3- The online seller instills confidence in customers.	3. 41	1. 240
A4- I feel safe in transactions with the online retailer.	3. 50	1. 231

4.4.4 Empathy

According to Table 4.10, it shows the results of descriptive analysis for E. The result of the mean values of the variable range between 3. 22 to 3. 66. As a result, most of the respondents agree with the items in E.

Table 4.8: Descriptive Analysis for Empathy

Items	Mean	Std. Deviation
E1- The online seller gives customers individual attention.	3. 22	1. 278
E2- I feel that my personal needs have been met when visiting the online seller's online shop.	3. 40	1. 183
E3- The online seller's online shop provides me with information and products according to my preferences.	3. 66	1. 159
E4- The online seller understands the needs of the customers.	3. 36	1. 270

4.4.5 Tangibles

Table 4.11 shows the results of descriptive analysis for T. The range of mean values for all items falls from 3. 33 to 3. 65. As a result, most of the respondents agree with the items in T.

Table 4.9: Descriptive Analysis for Tangibles

Items	Mean	Std. Deviation
T1- The online seller's Web site is visually appealing.	3. 35	1. 220
T2- The online seller's Web site has an appropriate style of design for its site type.	3. 33	1. 238
T3- The information of the online seller's Web site is valuable to make purchase decision.	3. 65	1. 176
T4- The information of the online seller's Web site is useful for shopping needs.	3. 60	1. 174

4.4.6 Security

According to Table 4.12, it shows the results of descriptive analysis of S. The mean values for the items in S range from 3.43 to 3.82. As a result, most of the respondents agree with the items in S.

Table 4.10: Descriptive Analysis for Security

Items	Mean	Std. Deviation
S1- I feel my privacy was being protected by this site.	3.43	1.339
S2- The website provides adequate security features.	3.78	1.122
S3- The online shop able to stop the unauthorize transaction immediately.	3.82	1.111
S4- The website helps the users to avoid the scammer by launch out the safety tips.	3.52	1.274

4.5 Descriptive Analysis of the Dependent Variable

According to Table 4.13, it shows the results of descriptive analysis of CS. The mean values for the items in CS range from 3.25 to 3.89. As a result, most of the respondents agree with the items in CS.

Table 4.11: Descriptive Analysis for Customer Satisfaction

Items	Mean	Std. Deviation
CS1- I think I did the right thing when I decided to use this online seller for making my purchase.	3.55	1.142
CS2- My choice to use this online seller was a wise one.	3.25	1.239
CS3- Based on all my experience with online seller, I feel very satisfied.	3.34	1.266
CS4- Overall, I am satisfied with the decision to use the online seller.	3.89	0.988

4.6 Factor Analysis

According to [Theodoros A. Kyriazos \(2018\)](#), three main steps require conducting factor analysis, which is assessing the suitability of the data, factor extraction in addition to factor rotation, and interpretation.

Step 1: Sample size is the main problem that needs to be solved. There are many authors who voice different opinions but they agree completely with the larger and the better one.

The reason is because smaller samples will lead to a less reliable correlation coefficient. Other than that, there is another issue which is the strength of the intercorrelations of each item. [Theodoros A. Kyriazos \(2018\)](#) says the correlation matrix with results greater than 0.3 is preferable. Aside from this, there are two tools to test the factorability such as SPSS, including Bartlett's test and Kaiser-Meyer-Olkin (KMO); KMO with an index of 0 to 1 is considered appropriate, while Bartlett's test ($p > 0.05$) is a proper value for factor analysis [Theodoros A. Kyriazos \(2018\)](#).

Step 2: Factor extraction involves examining the least number of factors used to present the interrelationship among the variables [Theodoros A. Kyriazos \(2018\)](#). Although there are many approaches used for this method, the most frequency used is PCA, considering the number of factors is dependent on the researcher's needs. In addition, it is using a simple way to minimize the factors or use the original data to elaborate more details. There are three techniques used to determine the number of factors, namely Kaiser's criterion (preferably eigenvalues greater than 1.0), Catell's scree test (plotting the eigenvalues by finding the point where the curve changes direction and becomes horizontal, all factors above the elbow are considered) and Horn's parallel analysis (comparing the size of eigenvalues with others obtained using similar data and size, eigenvalues that exceed the corresponding values are retained) [Theodoros A. Kyriazos \(2018\)](#).

Step 3: Last step is to interpret the number of factors that have been determined. The interpretation process would be smooth if all the items were rotated. There are two ways to perform the rotation, which is orthogonal (Varimax, Quartimax, Equamax) or oblique (Direct Oblimin and Promax). Usually, Varimax is the most used for orthogonal

and Direct Oblimin used for oblique. This is because Varimax and Direct Oblimin able to minimize the number of variables with high factor loadings.

According to the present study, Table 4.14 shows the results of KMO and Bartlett's Test by using PCA and varimax as rotation yielded. According to the rule, the value of KMO should be more than 0.5. Table 4.14 shows the results of KMO which is 0.693 and fulfils the sampling adequacy requirement for factor analysis. In addition, the results of Bartlett's test was found significant with $p < 0.001$, it proof sufficient correlation among the components.

Table 4.12: Factor Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.693
Bartlett's Test of Sphericity	Approx. Chi-Square	2113.964
	df	378
	Sig.	.000

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4.7 Reliability Analysis

Reliability analysis had been applied and used as pilot test in this study. Pilot test known as pretest was conducted based on 30 questionnaires with a sample size of $S = 384$. The goal of the pilot test is to assess whether the questionnaire is accurate and collect the necessary data as expected. Therefore, the effectiveness of the pilot test and the reliability of the questionnaire will be tested. For pilot testing, the researcher uses Cronbach's Alpha to check internal reliability.

Table 4.13: Reliability Statistic of Variables

Variable	Cronbach's Alpha	N of items	Strength of Association
Independent Variables			
Reliability	0.837	4	Very Good
Responsiveness	0.684	4	Moderate
Assurance	0.770	4	Good
Empathy	0.611	4	Moderate
Tangibles	0.878	4	Very Good
Security	0.951	4	Excellent
Dependent Variables			
Customer Satisfaction	0.895	4	Very Good

Source: SPSS Output

Table 4.14: Reliability Statistic of Overall Pilot Test

Source: SPSS Output

Cronbach's Alpha	N of Items
0.948	28

Table 4.1 below shows Cronbach's Alpha of all variables. The results showed all of Cronbach's Alpha are more than 0.6, therefore all variables can be concluded that the items have relatively internal consistency. Cronbach's Alpha for Reliability is 0.837 measured by 4 items. The Cronbach's Alpha for Responsiveness is 0.684 measured by 4 items. Next, Cronbach's Alpha for Assurance is 0.770 measured by 4 items. Cronbach's Alpha for Empathy is 0.611 measured by 4 items. Then, Cronbach's Alpha for Tangibles

is 0.878 measured by 4 items. Cronbach's Alpha for Security is 0.951 measured by 4 items. Lastly, Cronbach's Alpha for Customer Satisfaction is 0.895 measured by 4 items. As a result, all the items within variables are having good correlation.

According to table 4.2, Cronbach's Alpha of overall variables is 0.948, which was excellent with 28 of the number of items. Hence, it can be concluded that the items have relatively internal consistency.



4.8 The Relationship between Independent Variables and Dependent Variable

4.8.1 Correlation Analysis

Table 4.15: Pearson's correlation

		IV1	IV2	IV3	IV4	IV5	IV6	DV1
IV1	Pearson Correlation	1	.200**	.398**	.255**	.275**	.207**	.398**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	384	384	384	384	384	384	384
IV2	Pearson Correlation	.200**	1	.104**	.306**	.203**	.259**	.247**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	384	384	384	384	384	384	384
IV3	Pearson Correlation	.398**	.104*	1	.147**	.372**	.237**	.311**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	384	384	384	384	384	384	384
IV4	Pearson Correlation	.255**	.306**	.147**	1	.004	.336**	.320**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	384	384	384	384	384	384	384
IV5	Pearson Correlation	.275**	.203**	.372**	.004	1	.038	.290**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	384	384	384	384	384	384	384
IV6	Pearson Correlation	.207**	.259**	.237**	.336**	.038	1	.186**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	384	384	384	384	384	384	384
DV1	Pearson Correlation	.398**	.247**	.311**	.320**	.290**	.186**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	384	384	384	384	384	384	384

According to [Theodoros A. Kyriazos \(2018\)](#), correlation analysis is a tool to describe the strength and route of a linear relationship between two variables, which are the dependent and independent variables. In this research, correlation analysis explored the

relationship of each independent variable, which were REAL, RES, A, E, T, S, and the dependent variable, which was customer satisfaction. According to [Theodoros A. Kyriazos \(2018\)](#), the only possible values for correlation coefficients are -1 and +1.

A predicted positive or negative correlation between two variables is indicated by the sign in front. If is a positive sign, it means that if one variable rises, the other variable will rise as well. A negative sign, on the other hand, suggests that if one variable rises, it may result in the other variable falling. According to [Cohen \(1988\)](#), the strength of the relationship had been differentiated by 3 main category which is small when $r = 0.10$ to 0.29 , medium when $r = 0.30$ to 0.49 and high when $r = 0.50$ to 1.0 .

According to the results, the correlation between all independent variables and dependent variable were positive. The strength of the relationship between variables had showed small and medium correlation where r values ranged from 0.10 to 0.29 considered as small and 0.30 to 0.49 considered as medium. In addition, there are 3 variables considered as small which is Responsiveness, Tangibles and Security. Another 3 variables are considered as medium which is Reliability, Assurance and Empathy. Reliability had the highest positive correlation with the customer satisfaction at 0.398 , while the lowest went to IV6 which is security at 0.186 .

4.8.2 Multiple Linear Regression Analysis

R^2 indicates the percentage of independent variables that can be explained by the dependent variables. From the model summary in Table 4.16, the R^2 of 0.268 indicates that 26.8% of the variation in the performance can be explained by the six independent variables in this study which is reliability, responsiveness, assurance, empathy, tangibles, and security. In addition, it can be explained that $100\% - 26.8\% = 73.2\%$ is caused by other factors affecting customer satisfaction.

Table 4.16: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.518 ^a	.268	.256	.61830

a. Predictors: (Constant), IV6, IV5, IV2, IV1, IV4, IV3

b. Dependent Variable: DV1

According to Table 4.17, it shows the result of ANOVA. The results show that F-test value is 22.989 with a significant level of 0.000. A p-value is smaller than 0.05 ($p < 0.05$), a significant relationship was presented between of reliability, responsiveness, assurance, empathy, tangibles and security. It has been determined with enough evidence that at least one of the independent variables can predict the dependent variable. This indicated that a model fit exists when the p-value is equal to 0.000.

Table 4.17: ANOVA Results

		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.731	6	8.789	22.989	.000 ^b
	Residual	144.127	377	.382		
	Total	196.859	383			

a. Dependent Variable: DV1

b. Predictors: (Constant), IV6, IV5, IV2, IV1, IV4, IV3

Next, as displayed in Table 4.18, the results of the coefficient analysis of the independent variables and the dependent variable. There are six independent variables including reliability, responsiveness, assurance, empathy, tangibles, and security. Each of the independent variables provides a contribution which is used to determine the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia. First, the strongest predictor is Empathy, $\beta = 0.211$. This because the unstandardized beta, β of Cause Proximity has the highest influence of positive relationship with the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia.

The second strongest predictor is Reliability, $\beta = 0.201$. This is because the unstandardized beta, β of length or frequency of support is the second highest positive value compared to other independent variables. It also has the second highest influence of positive relationship with the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia.

Then, the third strongest predictor is Tangibles, $\beta = 0.158$. This is because the unstandardized beta, β of length or frequency of support is the third highest positive value. It has the third highest influence of positive relationship with the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia.

The fourth strongest predictor is Assurance, $\beta = 0.108$. This is because the unstandardized beta, β of length or frequency of support is the fourth highest positive value. It has the fourth highest influence of positive relationship with the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia.

Followed by fifth strongest predictor is Responsiveness, $\beta = 0.084$. This is because the unstandardized beta, β of length or frequency of support is the fifth highest positive value. It has the fifth highest influence of positive relationship with the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia.

The lowest predictor is Security, $\beta = 0.009$. This is because the unstandardized beta, β of length or frequency of support is the lowest highest positive value compared to other variables. It has the lowest influence of positive relationship with the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia.

Table 4.18: Coefficient Analysis of Variables

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.824	.248		3.320	.001
	Reliability	.201	.043	.233	4.651	.000
	Responsiveness	.084	.047	.087	1.803	.072
	Assurance	.108	.049	.114	2.218	.027
	Empathy	.211	.049	.213	4.329	.000
	Tangibles	.158	.047	.165	3.346	.001
	Security	.009	.043	.011	.216	.829

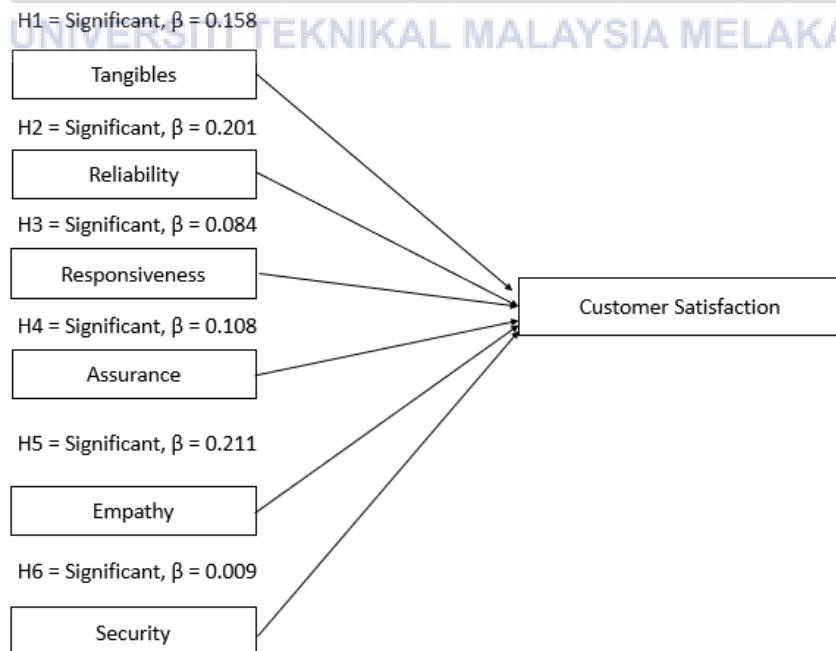
a. Dependent Variable: DV1

4.8.3 Summary of Hypotheses Testing

The researcher had tested all hypotheses, and it was found that all variables from H1 to H5 were accepted. As a result, it means that reliability, responsiveness, assurance, empathy, tangibles and security have a positive effect on youth customer satisfaction on e-commerce Malaysia by according to Table 4.19.

Table 4.19: Hypotheses Result

Hypotheses	Accepted	Not Accepted
H1: Tangibles have positive relationship between customer satisfaction.	√	
H2: Reliability have positive relationship between customer satisfaction.	√	
H3: Responsiveness have positive relationship between customer satisfaction.		√
H4: Assurance have positive relationship between customer satisfaction.	√	
H5: Empathy have positive relationship between customer satisfaction.	√	
H6: Security have positive relationship between customer satisfaction.		√



4.9 Discussion of Findings

In this part, the researcher doing the discussion as mentioned in Chapter 1, which is determine the factor which will affect the youth customer satisfaction on E-Commerce Malaysia.

H1: Tangibles have positive relationship between customer satisfaction.

The result shows that tangibles has positive relationship between customer satisfaction by reviewed on previous studies ([Hamawandy, 2021](#)), ([K. Ravichandran, 2010](#)), ([Jeong et al., \(2010\)](#)). However, there is a weak positive result shows in the previous study ([Gajeswka, 2019](#)). This is because tangibles more focus on the appearance of a thing in physical form such as shape and colour, but online shopping only can see and cannot feel it by touch. Although the results show tangibles have positive relationship between customer satisfaction, the previous study proof that some of the customers prefer to touch and feel the product in physical form. As a result, customers will more focus on the service and product quality provide by the seller. Also, the appearance of the website and online shop will be the key to fulfil the customer satisfaction.

H2: Reliability have positive relationship between customer satisfaction.

According to the previous studies, reliability has positive relationship between customer satisfaction ([Sarita, 2019](#)), ([Samar, 2007](#)), ([Lee, 2005](#)). The study from ([Gajeswka, 2019](#)) also shows that reliability is one of the dimension has high influence to the customer satisfaction. In addition, this study had mentioned the level of customer satisfaction was analysed as one of the main factors of e-commerce success. Based on the research from ([Lee, 2005](#)) had given some suggestions for online seller to improve the dimensions of reliability. For example, providing to up to date, provide the service on time, provide the service as promise. There is other suggestion from the study ([Samar I. Swaid, 2007](#)), the researcher had gave the suggestions for online seller to concentrate on developing a logistics support to ensure the efficient and accurate of delivery. In addition, the researcher also suggested the online seller to provide flexible receive method for the products such as self-collect for the customers who are stay nearby.

H0: Responsiveness don't have relationship between customer satisfaction.

According to previous studies, responsiveness has positive relationship between customer satisfaction ([Gulc, 2017](#)), ([Firdous, 2017](#)). However, the study of researcher shows responsiveness don't have relationship between customer satisfaction because the significant level more than 0.005 which is 0.072. The different results between researcher and previous studies caused by the different data collection method. One of the previous studies ([Mashaqi, 2020](#)) has used different data collection method compare to another studies which is qualitative method. The results obtained from 10 respondents showed responsiveness has a positive influence on customer satisfaction. In addition, the previous studies ([Gulc, 2017](#)), ([Firdous, 2017](#)) shows the positive relationship between customer satisfaction. This is because the previous studies have more wide area of target respondents which is the person who had used e-commerce compared to researcher who are target for youth residents. The previous studies also mentioned that provide prompt delivery to customers have positive influence on customer satisfaction.

H4: Assurance have positive relationship between customer satisfaction.

According to previous studies, assurance have positive relationship between customer satisfaction ([Nawzad Majeed Hamawandy, 2020](#)), ([Samar, 2007](#)), ([Kassim, 2010](#)). The results from previous studies are match with the study of researcher. It had show that how important of assurance on customer satisfaction. In addition, the study of ([Kassim, 2010](#)) mentioned that the quality of website design was one of the important thing to achieve customer satisfaction. ([Kassim, 2010](#)) also stated that the information on the website will help customers to understand more details about the products or services. As a result, it will help the online seller to fulfil the customer satisfaction.

H5: Empathy have positive relationship between customer satisfaction.

According to previous studies, the result had showed the positive relationship between customer satisfaction ([Gajewska, 2020](#)), ([Phan, 2015](#)), ([Wilson, 2019](#)). The result was matched with the result of this study. The previous studies stated that provide a good service is a key to achieve customer satisfaction. This is because most of the customers prefer to the service which will respond and solve their problem. ([Wilson, 2019](#)) mentioned in his study about empathy as one of the elements in service quality is important between customer satisfaction. In addition, ([Wilson, 2019](#)) also stated that as a product or service provider should have the knowledge and skills to answer and solve the question and problem face by the customers.

H0: Security don't have positive relationship between customer satisfaction.

The result of this study had showed security don't have relationship between customer satisfaction. There are previous studies from ([Nemati, 2012](#)), ([GIAO, 2020](#)) shows the same result with the study of researcher. Although the result shows don't have relationship between customer satisfaction, ([Nemati, 2012](#)) suggest that also should pay high concern to security or privacy to ensure the safety of customer profile. However, there is previous study shows that security have positive relationship between customer satisfaction ([H. T. Lau, 2020](#)). This study stated that security is significant and positive related to customer satisfaction. This is because security is a key to ensure the safety of the customer profile and credit.

4.10 Summary

In conclusion of this chapter, the researcher able to gather 384 samples for analysis according to the theory from Krejcie and Morgan (1970) about sample size calculation. First, the data analysed for frequency analysis so that the distribution of gender, age, education level and occupation were known. Second, descriptive analysis was applied to determine the data for means and standard deviation. The following tools used in this study was EFA to understand whether there were underlying items in the variables. The results of KMO fulfils the sampling adequacy requirement for factor analysis. Fourth, the variables were analysed for reliability to test the validity of each variable. Fifth, the relationship between the variables was determined by using correlation analysis and multiple regression analysis. As a result, the correlation between all independent variables and dependent variable were positive.



CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The purpose of this research is to determine the factor which will affect the youth customer satisfaction on E-Commerce Malaysia. Researcher had proceeded the data collection which is collect 384 samples from the public in Malacca. In this chapter, the researcher was discussed the summaries of the findings of the study. This chapter also discussed the contribution of the findings to the existing body of knowledge. Next, the following contents are limitation of the study and proposed suggestions for future research. At the end, this chapter come with conclusions of the study.

5.2 Summary of the Findings

First of all, this study had proposed three research objectives, which are determine the factor which will affect the youth customer satisfaction on E-Commerce Malaysia, analyze the relationship between the youth customer satisfaction and E-Commerce Malaysia and examine the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia.

5.2.1 Research objective 1: To determine the factor which will affect the youth customer satisfaction on E-Commerce Malaysia

In Chapter 1, the first research objective was to determine the factor which will affect the youth customer satisfaction on E-Commerce Malaysia. According to literature review in Chapter 2, SERVQUAL Theory can positively and significantly influence youth customer satisfaction. The SERVQUAL Theory include Reliability, Responsiveness, Assurance, Empathy and Tangibles ([Parasuraman et al., \(1988\)](#)). Researcher had added

security as the sixth factor because the researcher felt security was an important factor to ensure the youth customer satisfaction on E-commerce Malaysia.

Next, researcher had developed a questionnaires for data collection purpose according to the theory from previous author ([Parasuraman et al., \(1988\)](#)). The researcher had chosen quantitative method to proceed data collection in this study. The sampling technique selected by researcher to distribute the questionnaires was convenience sampling. In addition, the type of questionnaires which is Likert scale had been selected for the respondents to answer the questionnaires.

According to the result of descriptive analysis, the result showed that most of the respondents agreed with the items from each variable because the mean of each item from each variable was more than 3.00. As a result, it had proofed that most of the respondents agreed that all the factors in this study could influence the youth customer satisfaction on E-commerce Malaysia.

5.2.2 Research objective 2: To analyze the relationship between the youth customer satisfaction and E-Commerce Malaysia

Once the data collection process completed, researcher used the SPSS program to analyze the data collected from 384 samples. Correlation analysis had been applied to determine the relationship between independent variables and dependent variable. According to [Pallant \(2007\)](#), correlation analysis is a tool to analyze the strength and route of a linear relationship between the dependent variable and independent variables. In this study, researcher used correlation analysis to determine the relationship of each independent variable which is reliability, responsiveness, assurance, empathy, tangibles and security, and dependent variable which is customer satisfaction.

Based on the result of correlation analysis, it showed the correlation between all independent variables and dependent variable were positive. The strength of the relationship between independent variables and dependent variable showed small and medium correlation. In addition, there are positive relationship between independent

variables and dependent variable when independent variable increased, dependent variable also increased.

5.2.3 Research objective 3: To examine the extent of the impact of the youth customer satisfaction toward E-Commerce Malaysia

According to the results of the research, all independent variables had positive effect on the youth customer satisfaction on E-commerce Malaysia. Table below shows the ranking of the factor according to factor affecting youth customer satisfaction towards E-commerce Malaysia.

Table 5.1: Ranking of Factor

Factor	Beta value	Rank
Empathy	0.211	1
Reliability	0.201	2
Tangibles	0.158	3
Assurance	0.108	4
Responsiveness	0.084	5
Security	0.009	6

Regarding to table 5.1, empathy is the highest as the beta value are higher than other independent variables. Empathy is important to achieve youth customer satisfaction towards E-commerce Malaysia. This is because customers prefer the seller who able to provide service to answer or solve their question and problem.

The second highest beta value is reliability. As an online seller, commitment is an important factor to maintain customer satisfaction. This is because customer will feel satisfice when they get the promised products or services. For example, the customers received the products on time just as the promise by online seller.

The third highest beta value is tangibles. An attractive website will keep attract new customers to review your products or services. The customers prefer to view the website with something special or different with others. In addition, customers like to watch the video of products or services more than the pictures. This is because the video able to show the whole shape of products and let the customers had more image about the products.

The fourth highest beta value is assurance. Assurance refers to the ability of service provider to show their services and quality of products can be trusted by customers. As an online seller, they should understand and have the knowledge to answer the question from the customer about their products or services. By answering the questions from customers, customers will feel peace of mind when they can understand the products.

The fifth highest beta value is responsiveness. To give the customers more satisfice, online seller should increase the efficient of respond and feedback to customers when they have an issues or problem about products or services. Fast respond rate of online seller will give the customers feel they have got the attention from seller. As a result, the reputation of online seller will increase, and the customers will feel satisfice.

The sixth beta value is security. Security referred to the capacity of website to protect and avoid the customer information from the being misused during an electronic transaction. The website should enhance the security system to avoid the unauthorized transaction or cyber-attack.

5.3 Contribution of the findings

At the end of this research, this study had met the goal, which is research objectives, as mentioned in Chapter 1. Accordingly, the contributions of this research are divided into knowledge and practice.

5.3.1 Research contributions to knowledge

The usage of SERVQUAL factors in this study has enabled the researcher to determine the factor affect youth customer satisfaction towards E-commerce Malaysia. The SERVQUAL model mentioned that youth customer satisfaction is influenced by several factors which are reliability, responsiveness, assurance, empathy, and tangibles. In the end, the customer satisfaction was significantly influenced by the SERVQUAL factors. It shows that the reliability which is the promise service of online seller affected the customer satisfaction, the responsiveness which is the capacity of quick respond and feedback to customers, the assurance which is the knowledge and ability of online seller to give commitment to customers, the empathy which is the capacity to solve the issues effectively, and tangibles which is the appearance of products or services and websites.

In addition, apart from SERVQUAL factors, this research added security as the sixth factor. The researcher believed that security is the main factors to affect customer satisfaction. In the end, security has lowest influence on customer satisfaction. Hence, security couldn't add as factor affect youth customer satisfaction.

Next, the researcher applied descriptive analysis to identify and describe the characteristics of the variables. The researcher had used quantitative method for data collection purpose in this study. This is because the range of target respondents had more than 384. Other than that, hypothesis testing had been used to test the relationships between independent variables and dependent variables.

Furthermore, the researcher chooses SPSS program as the tools to analyse the collected data. SPSS programs help the researcher to analyse the collected data and obtain the result in this study. For example, frequency analysis, descriptive analysis and

correlation analysis. The researcher also uses multiple regression analysis to apply hypotheses testing between independent variables and dependent variable.

5.3.2 Research contributions to the practice

In this study, the findings showed that SERVQUAL factors had positive significant effect to the youth customer satisfaction towards E-commerce Malaysia except responsiveness and security. Hence, online seller or the person who are doing online business could use the knowledge as a reference to improve and develop own business model to fulfil youth customer satisfaction.

Furthermore, online seller or the person who are doing online business may study and understand the factors and come out with the ways to fulfil youth customer satisfaction. Reliability as an example, online seller should provide promise service on time to the customers. This is because promise service can help online seller to build up the commitment and confidence to the customers. The customers will give good praise and return to purchase if they get the good online shopping experience.

As for assurance, online seller should have the knowledge and understanding about their own products or services. It will help the seller to answer the questions by the customers. The commitment and confidence of online seller will build up among the customers. As a result, the customers will determine to purchase the products or services because of the trusted service.

To enhance more empathy, online seller should understand the need of customers and give more individual attention to the customers. Individual attention will let the customers feel they are important for online seller. Other than that, online seller should have the capacity to solve the customer's problem and concern effectively. As a result, customers will feel safe and satisfied when purchase the products or services.

As for tangibles, online seller should put more efforts on the website design and products and services' video. This is because online business can't let the customers touch the products or services in physical form. An attractive website design will help the online

seller to maintain current customers and attract new customers. In addition, video about products or services will let customers understand more details about the products or services they are interest. As a result, online seller able to fulfil the needs of customers and the customers feel satisfice to purchase the products or services.

5.4 Limitation of the research

The following limitations restrict the findings presented in this study. First, the limitation in this study was the target sample size only focused on the residents in Malacca, which is around 930,000 from the total population in Malaysia. Hence, the findings of this study could not be represented all Malaysians about the customer satisfaction towards E-commerce Malaysia.

The second limitation was this study only focused on youth people which is between 15 years old to 30 years old. The focus of age group had limited the result of this study. Hence, this study could not be represented all youth people in Malaysia about the customer satisfaction towards E-commerce Malaysia.

The third limitation was this study applied quantitative method only. Although the result of study will be more general, but it can't be more details compare to qualitative method and mixed method.

5.5 Recommendations for future research

The first recommendation of this study is future studies can focus on the residents from whole state in Malaysia. Compare to focused on Malacca, collect the data from whole state in Malaysia could get the result more accurate.

Next, this study applied SERVQUAL factors in determining the factor affecting youth customer satisfaction. However, this research did not use the moderator of the variables in the SERVQUAL model. As such, future research could use the entire model so that more refined findings could be achieved. There are other theories can apply to

determine the customer satisfaction, such as E-SERVQUAL and others; future research could also apply other theories.

Furthermore, the qualitative method and mix methods can apply to determine the factor affecting youth customer satisfaction towards E-commerce Malaysia. This is because qualitative method and mix method can obtain more detail results. Finally, there are several topics under E-commerce that are recommend for future researchers which are the relationship between customer satisfaction and E-commerce Malaysia, factor influence customer satisfaction and loyalty towards E-commerce Malaysia.

5.6 Conclusion

E-commerce was a new purchase behaviour for Malaysians. It had become popular after the pandemic of COVID-19. The rise of E-commerce had born more business opportunity for people. The advent of E-commerce had let our shopping experience become more convenience by tapping our fingertip on the device. The logistic service also become more popular because of the rise of E-commerce. Now a day, E-commerce was same as usual as the customers purchase the goods in the store.

On the other hand, the rise of E-commerce also encourages the E-commerce fraud. E-commerce fraud was getting serious and showing upping trends since 2018. The online shopping website which is lack of security will cause the customer profile steal by the hackers and sell to others. As a result, it had become an alert to the consumers to choose the website which are more safety, popular and secure. For example, Shopee and Lazada are the popular website used by the consumers.

E-commerce had changed the purchase behaviour of Malaysians. Especially E-commerce was very convenience by tapping on the device anywhere and anytime. The products will deliver directly to our place. Other than that, the price of products or services sell on the online website are cheaper than physical store. This is because online store doesn't have rental fees compare to physical store.

5.7 Summary

In conclusion, this research focused on determine the factors affecting youth customer satisfaction towards E-commerce Malaysia. Researcher selected and applied the SERVQUAL model to determine youth customer satisfaction towards E-commerce Malaysia. There are five independent variables from the SERVQUAL model, which are Reliability, Responsiveness, Assurance, Empathy, Tangibles with the addition of security as the sixth variable. The customer satisfaction was selected as the dependent variable. With respect to the literature review, five hypotheses were developed in this study.

To test the hypotheses in this study, researcher had applied descriptive research by distribute the questionnaire survey to the respondents. In addition, researcher had selected convenience sampling to collect the result from 384 respondents. All the independent variables have shown positive significant to the customer satisfaction except responsiveness and security. Hence, the customer satisfaction is influenced by Reliability, Assurance, Empathy and Tangibles.

Furthermore, this study had contributed to the knowledge in this field by applying the SERVQUAL factor in the context of youth customer satisfaction towards E-commerce Malaysia. This study also contributed to the practice in this field by applying this study as a guideline or reference to improve and achieve youth customer satisfaction towards E-commerce Malaysia. For example, reliability means the promise service by seller to customers which is ensure the delivery time or quality of products or services.

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APPENDIX A

Sample size determination by Krejcie and Morgan (1970)

Sample size determination by Krejcie and Morgan (1970)

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size.

S is sample size.

APPENDIX B

Gantt Chart Schedule for the Final Year Project (PSM 1)

Year	2021/2022															
Task / Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1
Webinar FYP 1																
First Meeting With Supervisor																
Topic Discussion & Confirmation																
Study Journals & Articles																
Forming Objectives & Research Framework																
Chapter 1-Introduction																
Revised Introduction with Supervisor																
Chapter 2 – Literature Review																
Revised Literature Review with Supervisor																
Chapter 3- Methodology																
Revised Methodology with Supervisor																
Submission FYP 1																
FYP 1 Presentation																
Revised of FYP 1																

APPENDIX C

Gantt Chart Schedule for the Final Year Project (PSM 2)

WEEK/ ACTIVITIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Create Questionnaire									M I D S E M E S T E R B R E A K							
Distribute Questionnaire																
Collect Questionnaire																
Analysis Data																
Submission Chapter 4																
Submission Chapter 5																
Proposal Correction																
Slide Preparation																
Submission of FYP 2																
Presentation 2																