

**FACTORS THAT AFFECTING CUSTOMER
SATISFACTION ON ONLINE SHOPPING AMONG
THE STUDENTS OF UNIVERSITY MALAYSIA
KELANTAN**

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Factors That Affecting Customer Satisfaction on Online Shopping Among The Students Of University Malaysia Kelantan

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2023

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ABSTRACT

This research study was carried out to explore the factors that affecting customer satisfaction on online shopping among the students of University Malaysia Kelantan from Faculty of Business and Entrepreneurship. Due to Covid-19, online shopping became the most popular to purchase goods and services. New technology and shopping apps has made life much easier for consumers to purchase safely and saves more time with e-shopping. In this study, the researchers had examined four factors, which are reasonable price, product quality, service quality and security. To describe the independent variables, mediating variable, and dependent variable, the disconfirmation model of customer satisfaction was used. The researchers gathered information systematically to gain more in depth knowledge about customer satisfaction. In this analysis, a quantitative data collection method and simple random sampling technique were used. A total of 342 students from Faculty of Business and Entrepreneurship under University Malaysia Kelantan were tested using questionnaires and being analyzed by using Pearson's Correlation Statistic Package (SPSS). The result indicates that all the elements have a significant relationship with University Malaysia Kelantan student's intention. The implication and future research of the study were discussed at the end of this paper.

Keywords: Customer satisfaction, Online shopping, Reasonable price, Product quality, Service quality, Security

CHAPTER 1: INTRODUCTION

1.0 INTRODUCTION

Customer satisfaction is a metric that measures a company's customers' level of satisfaction with its goods, services, and capabilities. Information about customer satisfaction, such as surveys and ratings, can assist a business in deciding how best to adjust or enhance its goods and services. In this chapter, the researcher will explain the background of the study, problem statement, research question, research objective, scope of the study, significance of study, definition of the term and organization of the proposal related with factor that affecting customers satisfaction on online shopping using e-commerce.

1.1 BACKGROUND OF THE STUDY

E-commerce is about purchasing and selling of goods or services over the internet that involves the transfer of money (Shouvik, 2019). The word e-commerce is also known as electronic commerce where it is used by users to purchase physical goods online and make online payments through devices such as smartphone. The popularity of e-commerce has increased over time and it has replaced the old method of physical buying and selling. Among the types of e-commerce that are often used by customers, especially in Malaysia, are such as Shopee, Lazada, Agoda, Booking.com, and so on. These types of e-commerce are divided into several uses such as food delivery, hotel reservations, online shopping, and so on. Based on previous research from Eugene (2022), in Malaysia, the use of e-commerce has increased especially during the strike of Covid-19 which has hit the world and requires customers to buy goods over the internet. The pandemic of Covid-19 makes e-commerce to improve on sales and performance which makes customers trust to buy goods over the internet. The use of e-commerce is also increasing because it has made it easier for customers to buy goods globally.

The use of the internet in today's times is increasing day by day and has brought the intention of consumers to online shopping. Online shopping has become a convenient platform as it eases the consumers to buy their needs and wants. Consumers only need a little time for online shopping and it is more convenient for them than physical shopping, which will face traffic jams, limited time, distant malls, etc. Based on previous research from Roszi (2021), there is a 577% increase in internet users out of three billion internet users globally compared to the year 2000, and 80% of internet users in Malaysia have made

purchases online.

Based on previous research from Puveandharan (2021), a small population of Malaysia is people aged 40 and above who still do not shop online because they think shopping directly from a store is more accessible. Younger generations such as generation Z are more inclined to online shopping because they are tech-savvy. Generation Z is tech-savvy because they were born in the late 2000s which is at that time they had started using the latest technologies that made it easy for them to use the internet.

Customer satisfaction can be defined as the user's fulfillment response. The response given is the customer's evaluation based on the product or service received and whether the product or service can meet the customer's needs or expectations. Customer satisfaction can be assessed if the customer's expectations of the product or service are met (Emy, 2019). In other words, customer satisfaction is the happy feeling that results when the goods purchased and received meet the customer's expectations. Customer satisfaction is an important thing in every business because a business that improves over time depends on customers when their products or services can satisfy customers.

There are several factors that affect customer satisfaction towards online shopping. In this study, the researcher selected four factors which are reasonable price, product quality, service quality, security, and examined their relationship with customer's word-of-mouth and customer satisfaction.

1.2 PROBLEM STATEMENT

The problem of price comparison is one of the main problems for every customer who wants to buy products either online or traditionally. Customers expect the price of products through online shopping to be lower than in traditional stores (Kang Lo et al., 2013). Buying goods traditionally requires customers to go to a store and compare prices manually. Traditional stores require customers to travel from home to the store and face difficulty finding parking (Sarkar, 2017). On the other hand, purchasing goods online only requires you to open a website and make a virtual price comparison. Customers can compare product prices from other websites and discover products at lower costs than the pricing in the traditional stores since online retailers offer a variety of goods and services (Lim et al., 2004).

Besides that, the product quality is one of the problems for every customer who wants to buy products either online or traditionally. A problem occurs when customers do not know

the quality of the product they want to buy in the offline store because the offline store only labels the product name. This makes customers buy with hesitation because they are worried about the quality of the product not reaching customer satisfaction (Ghani, 2020). On the other hand, customers can find out the quality of products through online shopping because there is a description of the product as well as reviews from other customers that allow customers to buy without hesitation about the quality of a product (Lin et al., 2011).

Service quality is one of the problems for every customer who wants to use their services either online or traditionally. Very high levels of purchase intention are the result of good service quality and satisfaction (Sharma, 2017). Problems that occur when customers are not satisfied with the quality of service in offline stores such as having to queue for a longtime for payment due to limited payment counters and many customers. On the other hand, customers only need online shopping to enjoy customer satisfaction in the services provided such as fast delivery, fast payment, customer service and so on without having to go anywhere (Biswas, 2019).

The last one is security. Security will be a big problem as it becomes the fear of every customer who wants to do online shopping (Imtiaz, 2016). Customers fear the leakage of personal data such as address, identification, bank information and others. This problem occurs when there are fake online stores, fake websites, and other fraudulence (Aseri, 2021). On the other hand, personal data can be protected when the customer first identifies a website or online application that is safe to use, such as checking the site address, which includes HTTPS instead of HTTP (Aseri, 2021).

1.3 RESEARCH QUESTION

Research questions being conducted to identify factors that affecting customer satisfaction among students through online shopping using e-commerce in Malaysia. The questions are as follow:

- What is the significant relationship between price and customer's word-of-mouth?
- What is the impact of product on customer's word-of-mouth?
- What is the significant relationship of service quality on the customer's word-of-mouth?
- How does the security influence on customer's word-of-mouth?

1.4 RESEARCH OBJECTIVES

This research aimed at better understanding the factors that affecting customer satisfaction among students through online shopping using e-commerce in Malaysia. In determining factors that have an impact on students' online purchasing, these were to be achieved by identifying factors analysis.

- To examine the significant relationship between price and customer's word-of-mouth.
- To observe the impact of product on customer's word-of-mouth.
- To investigate how the service quality has influenced on customer's word-of-mouth.
- To determine the significant relationship between security and customer's word-of-mouth.

1.5 SCOPE OF THE STUDY

The sample for this research are consisting of university students of University Malaysia Kelantan (UMK) in Pengkalan Chepa. In this research, this study focuses on the factors that affecting customer satisfaction online shopping using e-commerce, which it influenced based on price, product quality, service quality, and security. Students of University Malaysia Kelantan Pengkalan Chepa are the targeted population and respondents. The factor affecting is acknowledged through online survey by sending the e-questionnaire via social media like WhatsApp, Telegram, Instagram, and so on.

The customer satisfaction on online shopping segment are the visual of the scene to get improve for the online purchasers from having problems while doing online shopping by considering to all the four elements.

1.6 SIGNIFICANT OF THE STUDY

The significance of this study implies advantages that were gained by few parties after conducting this study. This research is to identify the factors affecting towards customer satisfaction on online shopping based on the four elements as stated in previous section.

The main aim of doing this research is to make the researcher to realise the actual factor that affect in customer satisfaction. To obtain the information based on the topic

through online research, article, journal, magazine, and many more. The researcher also did create some application that will give benefits to the respondents, the students of University Malaysia Kelantan Pengkalan Chepa.

The researcher or entrepreneur was given the ability to carry out the study by using the techniques they studied during the lecture period. The findings of this study will provide potential entrepreneurs with knowledge who want to explore the research relevant to this sector. Based on the knowledge from the study, new entrants can also strengthen their company approach and also able to form more imaginative and creative application compared to us. The information or the research that the researcher has done can also help the entrepreneur to achieve their goals in the future.

The benefit of this research will be gained by some of the students, and staffs too as they are one of the online purchasers. This is because the research is about a topic that the factor affecting in customer satisfaction on online shopping to improve some of the problem that arises among the purchasers while do shopping on online. The researcher targeted the university students as one of the online purchaser to see on how the four elements get influencing them while doing online shopping.

1.7 DEFINITION OF TERM

The important factor of shopping online can be defined price. Consumers expects the prices of products and services to be lower than on the internet rather than store shopping (Vasic et al, 2019). Based on a research, consumers expect similar prices in all online stores but may not compare prices in online and stores. Comparable prices in online shops can be assumed to be another important factor of online shopping. A findings shows that the prices offered from online stores are lower than traditional stores.

Factors that influencing customers to shop online, as well as how product type influences the decision (Lin et al 2018). The research finds that the readiness of product information on the websites is an important factor influencing buyers' decision to shop online. One of the reasons for customers' adoption of online shopping has identified as product variety according to Tarhini (2021).

Service quality can be referred as the level to which customers believe a system to be trustworthy, secure and authentic. Service quality is important to increase customers' trust in the website (Shafiee et al, 2017). Customers are encourage to adapt with online shopping if

they realize a high level of service quality on the specific website. Service quality is very crucial because online customers transact with invisible retailers in offering such services as fast and on time delivery, also easy return of goods.

Security is very important factor for online shopping. A few findings has stated that e-commerce systems should offer security or customer information as well as information about their transactions while shopping on the internet. Customer information could be used for many causes, increasing the risk of the customers. Customer will refuse to provide their information when websites ask for it and they will recognize unfairness if they disagree with the information practice on online shopping platform (Mofokeng, 2021). Therefore, customers may think security or privacy is an important factor that influencing their behaviour to online shopping.

Another factors that affecting customer satisfaction towards online shopping is customers' word of mouth. A researcher stated that customers informal communications with others about specific products and services for the ownership usage or aspect (Verma et al, 2020). Word of mouth intention is a crucial indicator of continuous behaviour to generate satisfaction in customer experience (Jing et al, 2017).

1.8 ORGANIZATIONAL OF THE PROPOSAL

In chapter one, discusses the relationship of mediating variable between the dependent variable and four independent variables using previous research and statistics. To summarize the research, there are five chapter. This study is to examine the factor that affecting customer satisfaction on online shopping.

The second chapter focuses on the variables and develop a theoretical framework through the comparison of research hypothesis. Furthermore, hypothesis are developed to test the theory validity.

The third chapter includes data collection methods, research design, sampling techniques, sampling size, measurement of the variables and summary. The target audience is also determined by sampling design, which is divided by five sub-chapters to be described.

Chapter four highlights about data analysis and finding in research methodology. The questionnaire results will be presented in this chapter. It will be presented in the SPSS format. SPSS is a software that used to complete the quantitative analysis on datasets.

Chapter five will be the conclusion and last discussion of the study. The chapter will

also include a statistical analysis summary, discussion, implications and recommendation for future study.



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CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter mainly discusses the literature review for the topic which is factors that affecting customer satisfaction on online shopping using e-commerce. The factors will be reviewed by researchers from previous studies. The four factors are price, product, service quality, and security. This chapter also shows past studies that connected with online shopping.

2.2 UNDERPINING THEORY

This study aims to find out the level of awareness of the University Malaysia Kelantan students on identifying factors that affecting customer satisfaction through online shopping using e-commerce.

Customer satisfaction is known as the consumer's evaluation on how effectively the business, typically a service business has adhered to its commitments. Consumers assess their initial expectations of expected value to their perception of the actual value they perceived when they bought or used the goods or service, as explained in the general discussion of customer satisfaction. Customers are effectively confirms or disconfirms how well the organisation has performed because they are comparing two aspects previous expectations to actual performance. This process is referred to as the Disconfirmation Model of Customer Satisfaction in textbooks on services marketing.

The following inputs have contributed to the development of the customer's expectations over time which are the most recent communications from the company (mainly advertising and promotional deals), the company's reputation (which is the aggregate of their long-term communication efforts), word-of-mouth (WOM) spreading among individuals (possibly also including salespeople), reports from outside media, facts and reviews found online, and previous client experiences with the business.

These four key factors together will establish and mould each consumer's level of value expectations from the business. Based on each consumer's unique exposure to the various communications, their amount of purchasing engagement, and their prior experiences, expectations will typically vary to some extent.

2.3 FACTORS THAT AFFECTING CUSTOMER SATISFACTION (INDEPENDENT VARIABLES)

2.3.1 REASONABLE PRICE

From the perspective of the consumer, "price is what is given up or sacrificed to Obtain a product or service," according to Zeithaml (1988). Based on Bei and Chiao's (2001) findings, "What is sacrificed or given up in order to obtain a good or service is referred to as the price, according to Kotler and Armstrong (2012), who also argued that the price is the sum of money. The total of the values that consumers exchange for the advantages of owning or utilising a good or service; the price that is put on a good or service "

The high-low price range of a product can have a big impact on a customer's decision to buy it. This is how people perceive a certain price. Customers will pay close attention to what other customers have spent; nobody likes to spend more money than other customers. The fairness of the price will affect customers' perceptions and, eventually, their willingness to purchase. For example, toothpaste goods, the price is the sum of money withheld from the consumer in return for a tube of toothpaste, customer value transferred to obtain the advantages of toothpaste ownership or use. Kotler, Keller, and Kusdiyah (2012) described pricing as a measurable concept made up of a number of indications, including the price that is reasonable, fair, discounted, competitive, and suitable in online purchasing at Lazada.

H1: Price has a significant and positive impact on word of mouth.

2.3.2 PRODUCT QUALITY

Product quality is a set of features and characteristics of a marketable goods that meet basic requirements and can be controlled by the supplier in order to meet consumer expectations. Researchers agreed that product quality is one of the most influential indicators of customers satisfaction. Lee (2017) stated that a high risk purchase existed when the product was important to customer and customer may have a stronger desire to learn more about the product or look for alternative option such as product from Lazada, Shopee and much more.

Customers prioritize quality over anything else when it comes to shopping online. Although online shopping does not allow consumers to directly touch or feel the quality of the product, comments on the website such as Shopee can provide some indication of the

product quality (Guo et. al, 2017). According to a findings, quality is an essential property of a product and the expected standard of product or service achievement. Improving product quality will have a positive impact on consumer satisfaction.

One of the factors that lead to customer satisfaction is product quality which companies must understand in order to create it. Yanti Murni stated that quality has a major impact on customer satisfaction. Consequently, it is agreed that customer satisfaction were effected by quality of the products. Apart from that, customers tend to shop online more often if they satisfied with the products.

H2: Product quality has a significant and positive impact on word of mouth.

2.3.3 SERVICE QUALITY

A research shows that factors of online shopping include the service quality. Service quality is essential for businesses to survive while maintaining customer trust. The highest relation for service action is the quality, which is a determinant of the company's success. Quality, satisfaction and dissatisfaction are all discussed in the context of service quality. If the customer receives a higher than expected level of service, then the service is high quality. If the service meet the customer's needs, then the service is good and achieve customers' satisfaction. In contrast, if the service received fail to meet the customer's expectations, the service is poor quality or incompetent.

Service quality has a direct impact on customers' ability to maintain strong and loyalty from online stores. According to Guo et al., the quality of services can support online traders in generating an effective and efficient way of shopping, shipping products and services. The concept of service quality was first introduced by Parasuraman et al. Service quality is described as the extent to which service meets the needs of customers and measured by comparing the expectation. A study showed that service quality is improvements made by businesses to increase the quality of products, processes and services. SERVQUAL was created by Parasuraman et al. to measure the service quality from the customers' perceptions. There are five dimensions of SERVQUAL model including reliability, tangibility, assurance, responsiveness and empathy.

In contrast, a number of studies on online commerce believe that service quality has significant impact on customer satisfaction (Vasic et al, 2019). This is why provide a high quality service plays a crucial role in improving the customer satisfaction. Muh Feroza stated

that the level at which a website can effectively and efficiently influence the customers shopping needs, making purchases and the delivery of the products.

H3: Service quality has a significant and positive impact on word of mouth.

2.3.4 SECURITY

Security plays a substantial role in online shopping, it is seen as a key factor that online shoppers take serious. Security issues associated with digital banking arises as a result of such traitor from the medium through which online banking is carried out and those who use it, rather than from transactions. The reason of doing so or not is obvious, where the security concerns have gradually leaped into online banking, and thence the use of e-banking by the social circle is also encouraged by security (Kelly, 2019). The data transmission in security is seen as a crucial component in online banking since it protects the user data from being accessed and theft the data by hackers. On the other hand, authentication is also seen as another crucial step which restricts access to the data to only authorised individuals. It's essential to avoid complicated authorisation in order to process data rapidly (Ibrahim et al., 2016). Based on the study done by Hayikader et al., they had looked at several security concerns with the structure of online banking platform and do investigate the security ways to address the problems.

H4: Security has a significant and positive impact on word of mouth.

2.4 CUSTOMER SATISFACTION ON ONLINE SHOPPING

Customer satisfaction can be defined as the user's fulfillment response. The response given is the customer's evaluation based on the product or service received and whether the product or service can meet the customer's needs or expectations. Customer satisfaction can be assessed if the customer's expectations of the product or service are met (Emy Ezura A. Jalil, 2019). Online shopping is a process where customers can buy goods and services directly from sellers without meet face to face. In other words, online shopping is the process of buying goods and services using a machine via the internet (Thangavel, 2015).

Due to the convenience, many customers choose to online shopping compared to shopping directly at the store. Online shopping allows customers to buy goods and services globally. In other words, there is no limit to where to get the desired goods and services for example, customers from Malaysia want to buy goods from China and only need to buy

online without having to go to China. However, online shopping happens when customer satisfaction can be achieved. Customer satisfaction can be achieved through previous experience and customer trust in online shopping. Based on previous research from Rashed Al Karim (2013), customers prefer online shopping because it is very convenient for them as they can make purchases 24/7 hours. But in customer satisfaction, it depends on several factors such as price, security, and so on. Online shopping will not happen if customer satisfaction is not achieved if these factors are not managed well by the seller.

2.5 CUSTOMERS WORD OF MOUTH

Word of mouth is the process of informing others about a specific product or service. Word of mouth is also plays an important role of affecting customer satisfaction. Recommendations from word of mouth for other customer that is easily discussed among people who have direct relationship, experience or not real experience (Nguyen et al, 2019). The impact of sales performance on online indicated by online products reviews even though there is some argument about which dimension associated with online reviews is most influential (Wu et al, 2018).

Furthermore, word of mouth is the greatest way to sell products or services because it is a human to human communication. Word of mouth is trustworthy because they will recommend the product or services that they use and impressed to family or friends (Nguyen et al, 2019). As stated above, word of mouth is marketing information among customers that can affect customers satisfaction EWOM is a way of communication from customers on the Internet (Al - Gasawneh et al, 2019).

Based on a research, contribution from EWOM that gives information to customers will experience different level of social and psychological distance among them and the product (Yang et al, 2020). For that reason, word of mouth is very crucial to the retailers. It is called indirect marketing strategies that will benefit the customer and also the retailers especially from online platform based on the reviews or social media marketing.

Additionally, word of mouth is also affected by customers expectations of products and content. In other words, customers will accept the product quality as beneficial based on the star ratings reviews since it may meet their expectations (Moore et al, 2019). As a results, customer word of mouth can increase sales and product reliability and drive to customers satisfaction. (Anastasiei et al, 2019). That is why word of mouth is critical to online retailers that can lead to customers satisfaction.

2.6 CONCEPTUAL FRAMEWORK

The framework model shows all independent variables and dependent variable. All of these independent variables were tested to determine whether they had a significant relationship to dependent variable. This study is to discuss the factors that affecting customer satisfaction towards online shopping using e-commerce. There are four factors that affecting customer satisfaction which are price, product quality, service quality, and security.

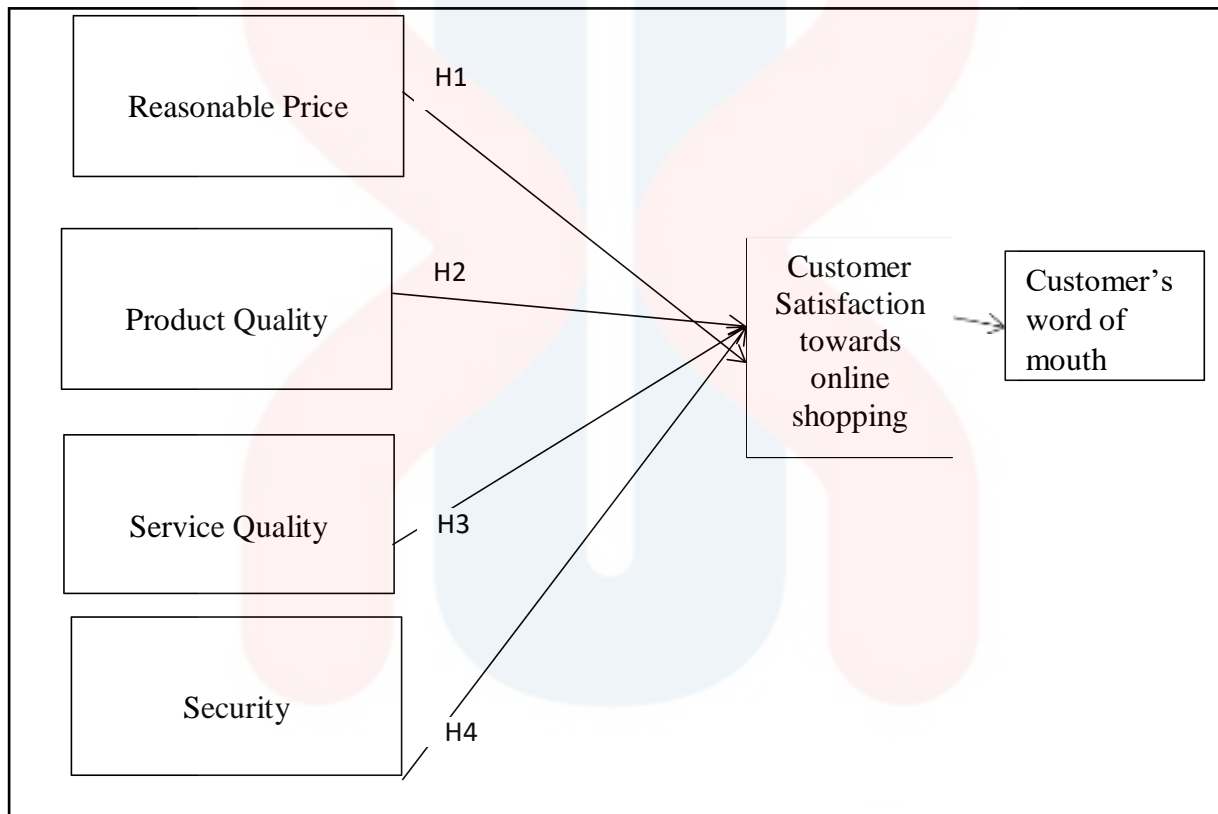


Figure 1: The Conceptual Framework

2.7 SUMMARY

In conclusion, this chapter discusses independent variables such as price, product quality, service quality, and security. This chapter will also go through dependent variable, which is customer's word of mouth. The following chapter will introduce the general concept of research methods.

CHAPTER 3: RESEARCH METHODS

3.1 INTRODUCTION

This chapter depicts how the study was conducted by the researchers. The key traits that contain in this chapter are, research design, data collection method, study population, sample size, sampling techniques, research instrument development, measurement of the variables, and the procedure of data as well. In this chapter, the researcher should know the type of data collection method use which is qualitative or quantitative data collection. To allow the researcher to adopt the method, it is necessary to always provide enough information. Hence, a suitable research method has been taken to ensure that the study is conducted properly.

3.2 RESEARCH DESIGN

The sort of information the researcher use in this analysis is quantitative. The technical process used in this research which is involving the collection of data, methods of analysis, and statistical tool in order to describe the factor affecting customer's satisfaction on online shopping among the students of University Malaysia Kelantan (UMK) in Pengkalan Chepa. According to the result of some research, most of the researcher had used Quantitative Design Method to carry out the study.

3.3 DATA COLLECTION METHOD

The definition of data collection is the methodology of collecting, estimating, and investigating accurate experiences for research using approved standard procedures (Syed Salman Qadri, 2021). In other words, data collection is done by the researcher to obtain informational data and enable it to respond to problem statements, answer questions, predict trends, probabilities, and so on. In data collection, there are two types of data collection which are primary data and secondary data.

Primary data refers to the collection of data through first-hand experience (Kabir, 2016). Primary data is also known as raw data. Primary data is data that has not been published from any study and it is collected for the first time. In other words,

this primary data is collected by the researcher himself to study a study. Information was collected through several types of questionnaires, observations, and interviews.

Secondary data refers to data that has been collected through published data in any form (Kabir, 2016). In other words, secondary data is data that has been collected by other researchers in a study. For example, previous data that have been collected by other researchers have been collected in the present to support the primary data and used to answer some questions if the secondary data is still relevant. Secondary data can be obtained from articles, magazines, journals, newspapers and so on.

In this study, the researcher used two research methods which are primary data and secondary data. For primary data, the researcher used a questionnaire and distributed it to the respondents to collect data. For secondary data, the researcher use previous studies by collecting existing data to support this study.

3.4 STUDY POPULATION

According to Shu Hu (2014), the definition of study population is the target population from which the actual sample is selected. The population of this study is wider than the concept sample frame. In this study, the population has been determined by the researcher who is a Universiti Malaysia Kelantan, Pengkalan Chepa student. There are 3451 students under the Faculty of Entrepreneurship and Business. These students include several courses such as accounting (SAA), Islamic bank and financial (SAB), entrepreneur (SAE), commerce (SAK), logistics (SAL), and retailing (SAR).

3.5 SAMPLE SIZE

Sampling is a technique used by a researcher to select a relatively small number of individuals from defined population as a subject for a study based on the objectives of the research (G Sharma, 2017). Sampling is an important factor in determine the quantity and reliability of much quantitative research. In this study, the participant of the population used is students from University Malaysia Kelantan of

Kampus Kota. The sample size of this study is based on the table of Krejcie and Morgan table.

Table 3.1
Table for Determining Sample Size of a Known Population

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

Note: N is Population Size; S is Sample Size Source: Krejcie & Morgan, 1970

Table 1 : Krejcie and Morgan Sample Size

3.6 SAMPLING TECHNIQUE

Sampling processes involves studying a subset of the total number of individuals from the population in order to make assumptions about the entire population. A specific sampling process is used to select random people. Choosing a sampling method necessities several decision for researchers. The most crucial decision is to use probability or non-probability methods. There are two faculties of students University Malaysia Kelantan which is Faculty if Entrepreneurship and Business and Faculty of Hospitality, Tourism and Wellness. Probability sampling is used to getting the results from the population.

3.7 RESEARCH INSTRUMENT DEVELOPMENT

Research instrument is used to collect information (data) to answer our research questions. It is also applied to both qualitative and quantitative approaches and it can approach it. Research instrument are able to produce a form of data appropriate to testing the hypothesis or addressing the research questions. In this study report, researchers will use quantitative data collection methods. Quantitative research measures issues by creating numerical data that can convert into valuable statistics. A wider group of people uses it to assess attitudes, opinions, actions, and other specific characteristics and extrapolate outcomes. Quantitative research methods have also emphasized the objective measurement and analysis of statistical, mathematical, or numerical data obtained through opinion polls, questionnaires, and surveys, as well as the manipulation of existing statistical data using computing tools. In quantitative research, measured data can be used to form facts and reveal trends.

A thorough analysis of the pertinent literature served as the foundation for the creation of a survey questionnaire. According to respondents' detailed responses, the target audience consists of UMK students, who are typically between the ages of 20 and 26 and utilise the internet to conduct various tasks, such as shopping. Because the researcher wishes to distribute the questionnaire to anyone who is familiar with online shopping. Additionally, information is gathered from respondents who have experience purchasing online in order to study the factors that affecting customer satisfaction on online shopping using e-commerce.

3.8 MEASUREMENT OF THE VARIABLES

For this study, a questionnaire that included a brief explanation of the study's objective and importance was employed as the instrument. In this study, we have used interval scale in the questionnaire. The interval variable is a measuring variable that is used to specify values measured along a scale with each point spaced evenly apart. The interval scale collects and measures data where intervals between two points are of equal distance. One of the most used interval scale questions is arranged on a five- point Likert Scale question, where each emotion is denoted with a number (1 to 5), and the variables range from strongly disagree to strongly agree.

LEVEL	LIKERT SCALE
Strongly Disagree	1
Disagree	2
Neutral/ Uncertainty	3
Agree	4
Strongly Agree	5

The first section included eight questions to learn about the customer's demographics, including age, gender, race and education level. Check boxes and dichotomous scales served as the foundation for this section. The second part focuses on dependent variable which is customer satisfaction. The third section concern on independent variables which is price, product, service quality, and security.

3.9 PROCEDURE OF DATA ANALYSIS

Once the data is acquired and recorded, the data will be analysed with several methods. This is important to guide and support the data collected using the questionnaire that are associated to three variables of dependent, mediating, and independent variable to achieve more accurate result. Statistical package for the social science (SPSS) is used for the simple descriptive data compute the mean score of factors and the advanced statistical procedures of factor analysis. It will be presented in form of tables, figures, and percentages. Then, the interpretation and discussion of the data will be constructed. SPSS is used in this study because it can collect the data and generate tabulated reports, charts and plots of distribution and trends, descriptive analysis and complex statistical analysis.

In meantime, one of the leading software tools, the partial least squares called SmartPLS were used in this study too, where it provides a rich documentation of analyses and reports to generate squares regression, bootstrapping options, blindfolding and matrix analysis. This is an easy-to-use software where it represented

as the best choice for most computation (Wong, 2013).

Pilot test will be carried out before to the circulation of the questionnaire. Pilot test will be carried out with some students of Universiti Malaysia Kelantan in Pengkalan Chepa. The survey was circulated among UMK PC students in order to produce a successful level confidence in the study. Based on the thumb rule of pilot study, the minimum size sample for pilot is 12 (Julious, 2003).

Reliability test is a measure of reliability obtained from administering the same test twice over a period of time to a group of individuals and also the measure the reliability on both independent and dependent variables. To obtain the reliability of the data, the researcher was using Cronbach's Alpha to estimate the reliability for the questionnaire. According to Jonas Moss (2020), the "Standardized alpha, a closerelative of coefficient alpha that represents as a Cronbach's Alpha was used to decide the internal consistency reliability of the independent, meditating, and dependent variable of the study. In general a score of more than 0.7 is considered acceptable and below from 0.5 is unacceptable, for more detail can refer to the table below.

Cronbach's Alpha value	Strength of association
< 0.6	Poor
0.6 to < 0.7	Moderate
0.7 to < 0.8	Good
0.8 to < 0.9	Very good
0.9 to > 1	Excellent

Table 3.9: Rules of thumb of Correlation Coefficient Size

Descriptive analysis is the most comprehensive form of quantitative analysis. Pearson Correlation Analysis and Multiple Regression Analysis will be the method utilized. Pearson Correlation Analysis was used to assess the impact of each variable. Researchers may determine whether or not to the independent variable is adversely affected by the recognition by word-of-mouth by using Pearson Correlation.

3.10 SUMMARY

In conclusion, this chapter examine the quantitative data and the explanation of the relationship between dependent variables and independent variables. This chapter discussed about sample size, sampling technique, research design, data collection method, study population, sample size, sampling techniques, and procedure of data analysis, research instrument and measurement of the variable.

CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The research analysis and findings of the collected data from the studies targeting 342 respondents are presented in this chapter. This questionnaire using the Google form is the primary source of the results. The data collected was analysed specifically through statistical analysis, such as implementation of IBM SPSS Version 26. This chapter aims to analyse and clarified the data collected. To obtain the outcomes, an appropriate research methods are thoroughly implemented and analysed such as the Preliminary Analysis which describes the reliability test of pilot study of 20 respondents as well. Besides, there are two types of analysis used in this study such as Descriptive Analysis and Pearson Correlation Analysis. Therefore, Normality Test and Reliability Test for total 342 respondents had been done in this chapter. The findings will be presented about the research objectives stated in the study. The method used to analyse the data is already discussed in the research methods chapter.

4.2 PRELIMINARY ANALYSIS

In chapter four, the report represented the data analysis and hypothesis testing of this study. The information gathered from the study was dissected utilizing the Statistical Package for the Social Science (SPSS) version 26.0 software and Partial Least Square (PLS-SEM) as a data analysis tool, which is a non-parametric statistical tool. A pilot study was completed by gathering information from 20 respondents. Then it had been tested on reliability test. Preliminary analysis was carried out to access the question's reliability. Additionally, preliminary analysis is the first important step in analysing the data often performed by any researchers. The purpose of this reliability test is to access the consistency of the data collected. Besides the preliminary analysis was conducted to ensure the analysis reliable of the data obtained from the survey. The data were measured by using Cronbach's Alpha value in the SPSS software.

Variables	Cronbach's Alpha	No of items	N (sample size)
Customer Satisfaction	0.940	5	342

towards online shopping			
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Table 4.1: Reliability Test for Customer Satisfaction towards online shopping

Based on table 4.1, the range of Cronbach's Alpha coefficient for Customer Satisfaction towards online shopping is 0.940.

Variables	Cronbach's Alpha	No of items	N (sample size)
Reasonable Price	0.959	5	342

According to the independent variable of the study, the Cronbach's Alpha coefficient for reasonable price is 0.959.

Variables	Cronbach's Alpha	No of items	N (sample size)
Product Quality	0.965	5	342

According to the independent variable of the study, the Cronbach's Alpha coefficient for product quality is 0.965.

Variables	Cronbach's Alpha	No of items	N (sample size)
Service Quality	0.970	5	342

According to the independent variable of the study, the Cronbach's Alpha coefficient for service quality is 0.970.

Variables	Cronbach's Alpha	No of items	N (sample size)
Security	0.938	5	342

According to the independent variable of the study, the Cronbach's Alpha coefficient for service quality is 0.938.

As a conclusion, the range of Cronbach's Alpha value is between 0.94 to 0.97 for all constructs in this study. In conclusion, all of the items in this study are understood by the target respondents because the value of Cronbach's Alpha value for each construct must exceed 0.7 which reflects the target respondents understand the items of each variable (Hair et al., 2012). According to the results above, all variables are accepted and the highest coefficient value is the Service Quality while the lowest coefficient value is the Security.

4.3 DEMOGRAPHIC PROFILE OF RESPONDENTS

4.3.1 Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	210	61.4	61.4	61.4
	Male	132	38.6	38.6	100.0
	Total	342	100.0	100.0	

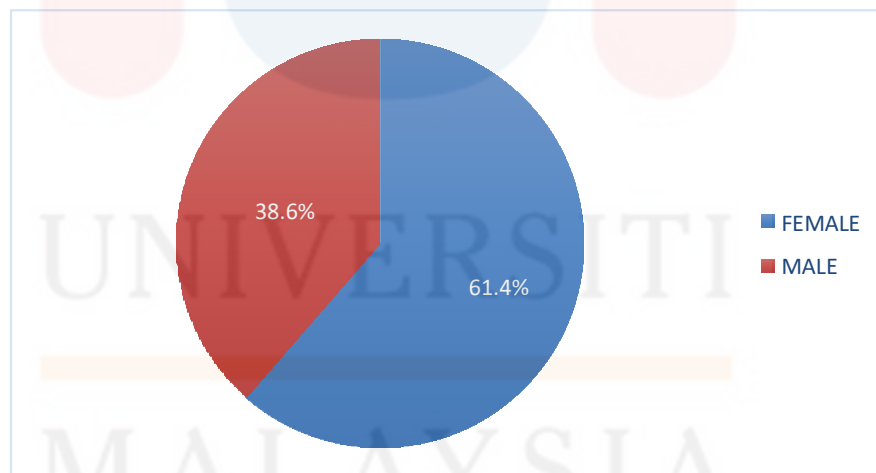


Figure 4.3.1 Number of Respondents based on Gender

Table and figure 4.3.1 shows the number of respondents on gender which consists of female and male. Based on the table and figure above, the number of female respondents are more than the male respondents. The percentage of female are 61.4 (n=210), while 38.6 percent (n=132) are the male.

4.3.2 Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19 - 20 years old	54	15.8	15.8	15.8
	21 - 22 years old	99	28.9	28.9	44.7
	23 - 24 years old	155	45.3	45.3	90.1
	25 years old and above	34	9.9	9.9	100.0
	Total	342	100.0	100.0	

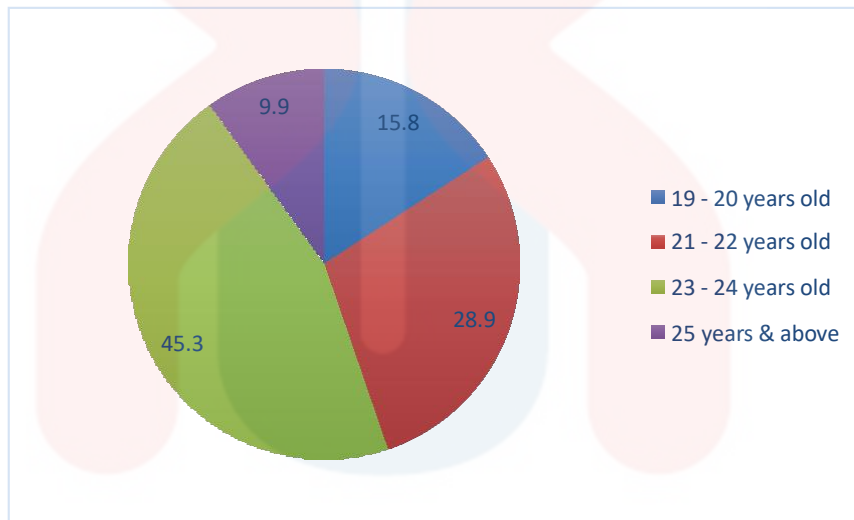


Figure 4.3.2 Number of Respondents based on the age

Table and figure 4.3.2 shows the number of respondents based on level of age. The highest respondents who answered the survey are from age of 23-24 years old with 45.3 percent (n=155), while the second highest respondents are from 21-22 years old with 28.9 percent (n=99), and the rest percentage with 15.8 and 9.9 are the respondents from age 19-20 and 25 & above respectively.

4.3.3 Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	84	24.6	24.6	24.6
	Indian	84	24.6	24.6	49.1
	Malay	134	39.2	39.2	88.3
	Other	40	11.7	11.7	100.0
	Total	342	100.0	100.0	

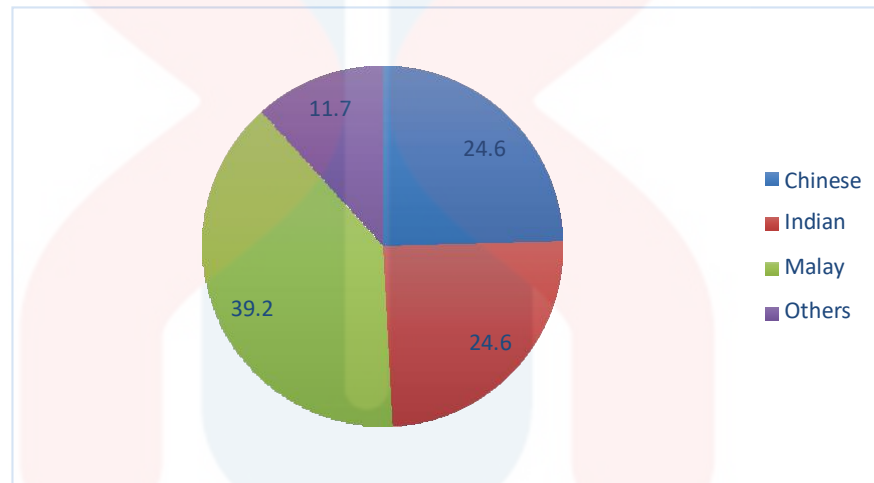


Figure 4.3.3 Number of respondents based on races

Table and figure 4.3.3 shows the number of respondents on race. The races has been divided into four categories, which are Chinese, Indian, Malay, and others. Among them, Malay respondents shows the highest score on answering the survey with 39.2 percent (n=134). Meanwhile, the percentage of Chinese and Indian respondents have answered are same in percentage number which is 24.6 (n= 84) each. The percentage of 11.7 (n=40) shows for the respondents answered from the others race.

4.3.4 Course year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First year	51	14.9	14.9	14.9
	Second year	66	19.3	19.3	34.2
	Third year	67	19.6	19.6	53.8
	Fourth year	158	46.2	46.2	100.0
	Total	342	100.0	100.0	

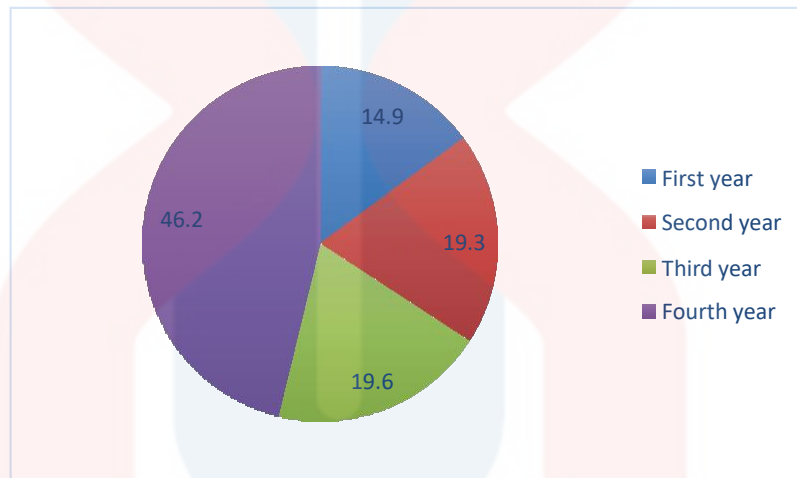


Figure 4.3.4 Number of respondents based on course year

Table and figure 4.3.4 shows the number of respondents from course year. The respondents of students who have answered the survey with the percentage of 46.2 (n=158) are from fourth year, 19.6 percent (n=67) from third year, 19.3 percent (n=66) from second year, and 14.9 percent (n=51) are from first year. Based on the chart, respondents from fourth year have answered the survey with the highest percentage, while the least showed by the first year respondents.

4.3.5 Courses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SAA	37	10.8	10.8	10.8
	SAB	36	10.5	10.5	21.3
	SAE	50	14.6	14.6	36.0
	SAK	60	17.5	17.5	53.5
	SAL	119	34.8	34.8	88.3
	SAR	40	11.7	11.7	100.0
	Total	342	100.0	100.0	

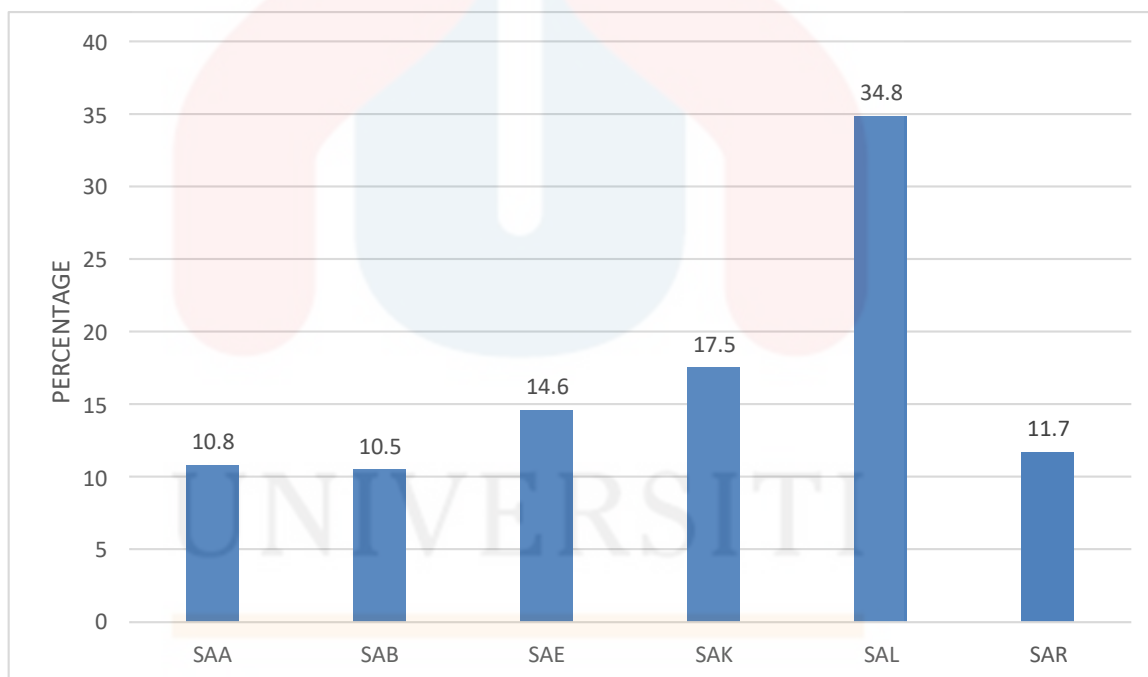


Figure 4.3.5 Numbers of respondents based on courses

Table and figure 4.3.5 depicts the numbers of respondents on courses. Respondents from course SAL showed the highest rank from all other courses with 34.8 percent (n=119). The second highest respondent have answered the survey are from SAK course with 17.5 percent (n=60). The rest three course of SAA, SAB, and SAE courses have ranked in average with its percentages of 10.8, 10.5, and 14.6 each.

4.4 DESCRIPTIVE ANALYSIS

4.4.1 Reasonable Price

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
The price of the product in online shopping are affordable	342	1	5	4.02	1.210
The price of branded products are much more expensive then the local brands in ecommerce	342	1	5	4.02	1.333
The ideal price of an electronic sold in online is affordable.	342	1	5	4.13	1.242
The product features can be considered the most valuable for its price	342	1	5	4.14	1.201
The prices of the products sold in online shopping are based to the economic pricing	342	1	5	4.11	1.211
Valid N (listwise)	342				

Table 4.1: Descriptive Statistics for Reasonable Price

Table 4.1 shows the mean, frequency and standard deviation for the item used to measure the reasonable price. There were five questions measured with the highest mean of 4.14 for the item P4 on the statement “The product features can be considered the most valuable for its price”.

Apart from that, there are two items with the lowest mean 4.02 for the P1 and P2. with the statement “The price of the product in online shopping are affordable” and “The price of branded products are much more expensive than the local brands in e-commerce”, the standard deviation for these two items is 1.210 and 1.333 respectively.

4.4.2 Product Quality

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
I prefer to shop online because varieties of product can be found and choose easily	342	1	5	4.05	1.170
Products in online stores are kept in good care	342	1	5	4.09	1.240
I am satisfied with the quality of product	342	1	5	4.09	1.198
The products were sold and sent in a suitable and proper wrapping	342	1	5	4.08	1.211
The quality of product are concerned from other customers' review and comments about the particular item	342	1	5	4.13	1.173
Valid N (listwise)	342				

Table 4.2: Descriptive Statistics for Product Quality

Table 4.2 shows the mean, frequency and standard deviation for the item used to measure the product quality. There were five questions measured with the highest mean of 4.13 for the item PQ5 on the statement “The quality of product are concerned from other customers’ review and comments about the particular item”.

Other than that, the lowest mean 4.05 was for the item PQ1. There are a total of 1.170 for the standard deviation for the item statement “I prefer to shop online because varieties of product can be found and choose easily”.

4.4.3 Service Quality

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
The store's website pages were easy to use and easy to access on the categories of product during purchase	342	1	5	4.08	1.196
The online stores website page will be updated in certain times and improve their services	342	1	5	4.11	1.203
The online stores provide more efficient, quick, and friendly customer services	342	1	5	4.13	1.186
Online stores offers varieties mode of services (life chats, SMS texting, self-service menus and so on)	342	1	5	4.17	1.205
Online stores provide a correct and a clear shipment number and notification to track the parcel in online	342	1	5	4.15	1.173
Valid N (listwise)	342				

Table 4.3: Descriptive Statistics for Service Quality

Table 4.3 shows the mean, frequency and standard deviation for the item used to measure the service quality. There were five questions measured with the highest mean of 4.17 for the item SQ4 on the statement “Online stores offer varieties mode of services (live chats, SMS texting, self-service menus and so on)”.

Other than that, the lowest mean 4.08 was for the item SQ1. There are a total of 1.196 for the standard deviation for the item statement “The store’s website pages were easy to use and easy to access on the categories of product during purchase”

4.4.4 Security

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
I'm confident in using a secured platform	342	1	5	4.14	1.185
I trust to give my personal details in online platform during the payment process	342	1	5	4.07	1.266
Many customers will repeat doing online purchase because it is safe and easy to use	342	1	5	4.07	1.197
The purchased details and chatting messages between the sellers and the buyers are encrypted	342	1	5	4.12	1.193
I will check for the security of the website stores and then only will proceed to pay	342	1	5	4.40	.843
Valid N (listwise)	342				

Table 4.4: Descriptive Statistics for Security

Table 4.4 shows the mean, frequency and standard deviation for the item used to measure the security. There were five questions measured with the highest mean of 4.40 for the item S5 on the statement “I will check for the security of the website stores and then only will proceed to pay”.

Otherwise, there are two items with the lowest mean 4.07 was for the item S2 and S3. The statement for those two items were “I trust to give my personal details in online platform during the payment process” and “Many customers will repeat doing online purchase because it is safe and easy to use”. There are a total of 1.266 and 1.197 the standard deviation for those two items.

4.4.5 Word of Mouth

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
I will buy the products again from the same store if I satisfied with it	342	1	5	4.13	1.156
I will buy a product when my friend tells me the product is very satisfactory	342	1	5	4.08	1.190
I will buy the product when I see good feedback from other customers	342	1	5	4.22	1.165
I will buy things that get a lot of attention. (viral product)	342	1	5	3.87	1.267
I was influenced to buy goods from the application without regard for quality (Tiktok, Shopee, Lazada and etc.)	342	1	5	3.77	1.351
Valid N (listwise)	342				

Table 4.4.5: Descriptive Statistics for Word of Mouth

Table 4.4.5 shows the frequency, mean and standard deviation for items used to measure the word of mouth. There are five questions with the highest mean of 4.22 for the statement “I will buy things that get a lot of attention (viral product)”. With the standard deviation of 1.165, WM3 has the highest number that strongly agree with the statement.

Moreover, the lowest mean 3.77 was for the item. There are a total of 1.351 for the standard deviation on the item statement “I was influenced to buy goods from the application without regard for quality (Tiktok, Shopee, Lazada and etc.)

4.5 Reliability Test

Variables	Dimension	Cronbach's Alpha
Independent	Price	0.959
	Product quality	0.965
	Service quality	0.970
	Security	0.938
Dependent	Word-of-mouth	0.940

Table 4.5 Result of Reliability test on variables

The Cronbach's Alpha is to measure a stability indicator of “goodness” in each item of the group and internal consistency. Based on Nunnally (1978) suggest that the scale measure of reliability whether it is unacceptable, poor, questionable, acceptable, good and excellent. Thus, Cronbach's Alpha value will be between $0.5 > \alpha$ to $\alpha \geq 0.9$, preferably 0.95. Based on table 4.5 above, it depicts that the Cronbach’s Alpha value for Word-of-mouth (dependent variable) is 0.940 which is considered as adequate.

Next, there are four main measures in independent variables. The first variable's Cronbach's Alpha value is 0.959 which considered preferable. Next for the product quality, the Cronbach’s Alpha value is 0.965 it indicates reliable. Later, the Cronbach's Alpha value for service quality is 0.970 which is best, then for security variable, the Cronbach's Alpha value is 0.938. And the value of Cronbach's Alpha for dependent variable, which is the word-of-mouth is 0.940 is considered as preferable.

4.6 Normality test

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Word of mouth	0.211	342	0.000	0.799	342	0.000
Price	0.257	342	0.000	0.737	342	0.000
Product quality	0.270	342	0.000	0.731	342	0.000
Service quality	0.289	342	0.000	0.718	342	0.000
Security	0.245	342	0.000	0.750	342	0.000

Table 4.6 Normality test analysis

In general, the Kolmogorov-Smirnov^a test and Shapiro-Wilk test, $p > 0.05$ is considered as normal, while $p < 0.05$ is considered as abnormal. Referring to the table above, the value for significant ($p=0.000$) of Kolmogorov-Smirnov^a test of all variable and significant value ($p=0.000$) of Shapiro-Wilk test for word-of-mouth, price, product quality, service quality, and security are considered as abnormal as its significant value is less than 0.05.

4.7 HYPOTHESIS TESTING

4.7.1 Research Hypothesis 1

Price has a significant impact on word by mouth.

		Word by mouth	Price
Word by mouth	Pearson Correlation	1	.876**
	Sig. (2-tailed)		.000
	N	342	342
Reasonable price	Pearson Correlation	.876**	1
	Sig. (2-tailed)	.000	
	N	342	342

Table above shows that the significant value and the number of respondents that 342 of students. The result 2-tailed significant between reasonable price and word by mouth is 0.000 with p-value of $0.000 < 0.05$. The result of Pearson Correlation Coefficient shows a fairly strong positive relationship between reasonable price and word by mouth which is 0.876. Therefore, the p-value for reasonable price is less than 0.05 level of significant where it provide enough evidence to achieve that the positive impact of reasonable price exist in population of Universiti Malaysia Kelantan student. The result explains that reasonable price has positive significant impact on word by mouth among students of Universiti Malaysia Kelantan, Pengkalan Chepa. Thus, hypothesis 1 is accepted.

4.7.2 Research Hypothesis 2

Product quality has a significant impact on word by mouth.

		Word by mouth	Product quality
Word by mouth	Pearson Correlation	1	.898**
	Sig. (2-tailed)		.000
	N	342	342
Product quality	Pearson Correlation	.898**	1
	Sig. (2-tailed)	.000	
	N	342	342

Table above shows that the significant value and the number of respondents that 342 of students. The result 2-tailed significant between product quality and word by mouth is 0.000 with p-value of $0.000 < 0.05$. The result of Pearson Correlation Coefficient shows a fairly strong positive relationship between product quality and word by mouth which is 0.898. Therefore, the p-value for product quality is less than 0.05 level of significant shows that it achieve the positive impact of product quality. The result explains that product quality has positive significant impact on word by mouth among students of Universiti Malaysia Kelantan, Pengkalan Chepa. Thus, hypothesis 2 is accepted.

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4.7.3 Research Hypothesis 3

		Word by mouth	Service quality
Word by mouth	Pearson Correlation	1	.883**
	Sig. (2-tailed)		.000
	N	342	342
Service quality	Pearson Correlation	.883**	1
	Sig. (2-tailed)	.000	
	N	342	342

Table shows that the significant value and the number of respondents that 342 of students. The result 2-tailed significant between service quality and word by mouth is 0.000 with p-value of $0.000 < 0.05$. The result of Pearson Correlation Coefficient shows a fairly strong positive relationship between service quality and word by mouth which is 0.883. Therefore, it has achieved the positive impact of service quality when the p-value for service quality is less than 0.05 level of significant. The result explains that service quality has positive significant impact on word by mouth among students of Universiti Malaysia Kelantan, Pengkalan Chepa. Thus, hypothesis 3 is accepted.

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4.7.4 Research Hypothesis 4

		Word by mouth	Security
Word by mouth	Pearson Correlation	1	.884**
	Sig. (2-tailed)		.000
	N	342	342
Security	Pearson Correlation	.884**	1
	Sig. (2-tailed)	.000	
	N	342	342

Table shows that the significant value and the number of respondents that 342 of students. The result 2-tailed significant between security and word by mouth is 0.000 with p-value of $0.000 < 0.05$. The result of Pearson Correlation Coefficient shows a fairly strong positive relationship between security and word by mouth which is 0.884. Therefore, the p-value for security is less than 0.05 level of significant where it provides enough evidence to achieve that the positive impact of security exists in the population of Universiti Malaysia Kelantan students. The result explains that security has a positive significant impact on word by mouth among students of Universiti Malaysia Kelantan, Pengkalanchepa. Thus, hypothesis 4 is accepted.

4.8 RESULT ANALYSIS AND DATA DISCUSSION ON SMARTPLS

The data processing part of the research procedure follows the data collection stage, which involved the responder filling out a Google form. This study uses statistical software, specifically SmartPLS version 4 for data processing. Data processing using the SmartPLS version 4 software has two stages, named the Measurement Model Test and the Structural Model.

4.8.1 The Measurement Model

The Measurement Model Test is used to assess if the research instrument can produce valid and trustworthy data, which are essential for good research data (Handayani and Rianto, 2021). A validity test is a test carried out to ascertain the reliability of a variable's indicator in research. The reliability test, on the other hand, measures how consistent a measurement is with an indicator when it is repeated (Sariwulan, I wayan Suteja, 2018). Convergent validity and discriminant validity are the two types of validity analyses. This analysis must be done at the measurement model stage before proceeding with further analysis. The study's measurement model is depicted in Figure xx.

	Cronbach's Alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
PQ	0.965	0.967	0.973	0.878
RP	0.961	0.970	0.969	0.864
S	0.937	0.939	0.953	0.803
SF	0.827	0.828	0.878	0.591
SQ	0.971	0.971	0.977	0.895
WM	0.942	0.954	0.955	0.811

Table 4.8: Reliability test

Based on Table 4.8 the results of the component reliability test using SmartPLS version 4, the results show that all variables have a Cronbach's alpha value above 0.8, a composite

reliability value above 0.8 and an average variance extracted value above 0.5. This can be concluded that the component test results the reliability of the research instrument model that has been made and designed is stated to be good because the research instrument has reliable data so that it can be continued at the next stage known as Measurement Model Test.

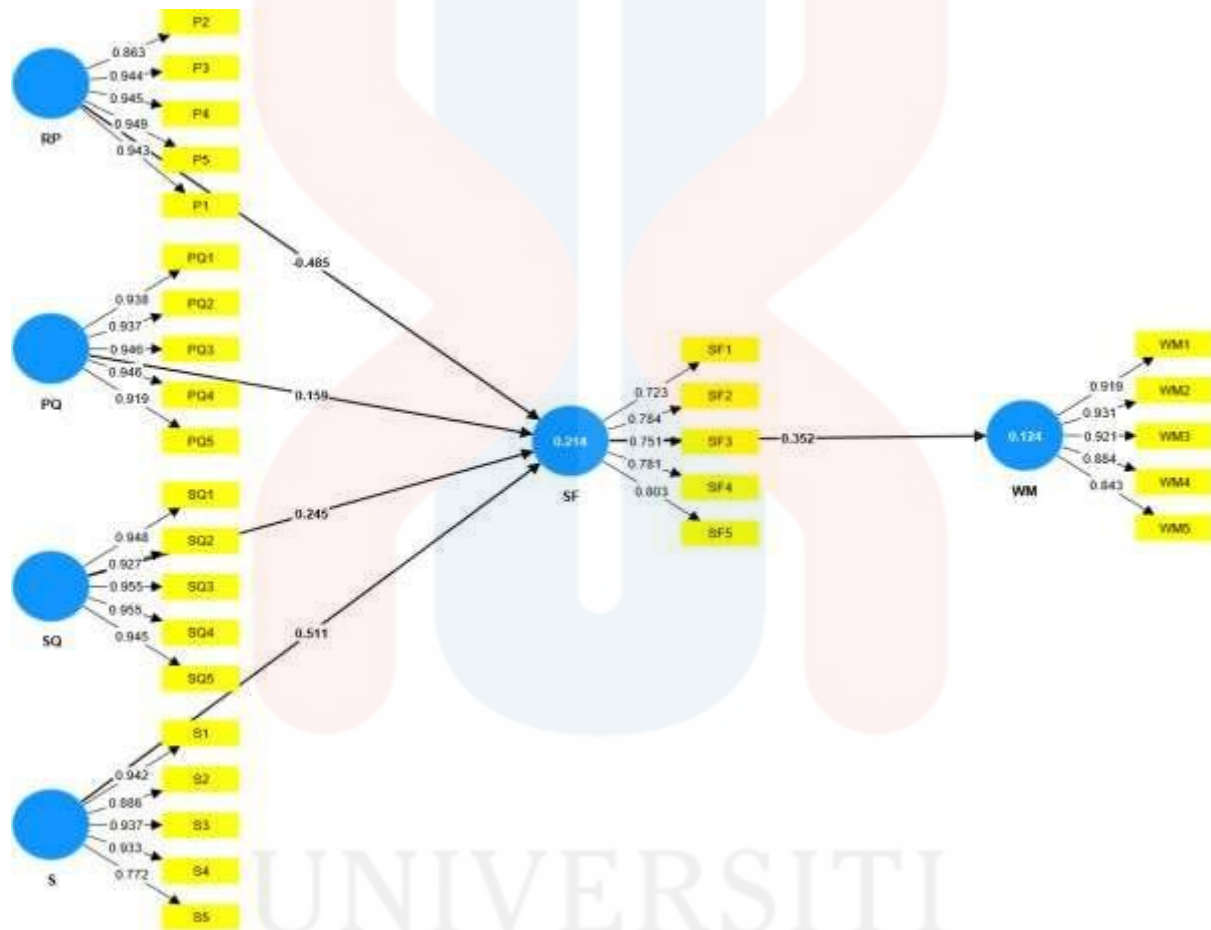


Figure 4.8: Measurement Model

If the loading is greater than 0.5, the average variance extracted (AVE) is greater than 0.5, and the composite reliability (CR) is greater than 0.7, the measurement model is deemed valid and trustworthy (Hair et al., 2017). Hence, the study finds that convergent validity was not a difficulty for the investigation. Table 3 shows that all of the prerequisites for establishing convergent validity have been met. The summary of convergent reliability for the measurement model was summarized in Table 4.8.

The next step is discriminant validity to confirm that the construct is statistically unique and differs from other constructs (Hair et al., 2019). There are different measures of 62

discriminant validity available for this analysis however, Fornell-Larcker (Fornell & Larcker, 1981) and Heterotrait-Monotrait ratio of correlations (HTMT: Henseler, Ringle, Sarstedt, 2015) are of substantial importance. HTMT, as the latter is a relatively new method preferred to test the discriminant validity in PLS-SEM. The former, Fornell-Larcker, has historical value as a traditional measure of discriminant validity (Hair et al., 2019). Following the previous PLS research by Buil, Martínez, & Matute (2019), the current study used the HTMT value to measure discriminant validity. In terms of the HTMT criterion, given that all values are more than 0.30 (Franke & Sarstedt, 2019). Table 4.8.1 below, demonstrated the discriminant validity established from the HTMT criterion. It can be concluded that the respondents understood that the given constructs are distinct. These validity tests have shown that the measurement items are valid and reliable.

	PQ	RP	S	SF	SQ	WM
PQ						
RP	0.981					
S	0.985	0.979				
SF	0.463	0.415	0.500			
SQ	0.999	0.985	0.993	0.468		
WM	0.946	0.927	0.940	0.393	0.929	

Table 4.8.1: Discriminant Validity using HTMT criterion

4.8.2 The Structural Model

A test used to identify and categorise the link between latent variables is the inner model test (Astakoni and Wardita, 2020). The P-value and the Original Sample value are used to calculate the path coefficient value, which is used to decide whether the hypothesis is accepted or rejected.

	PQ	RP	S	SF	SQ	WM
PQ				1.000		
RP				1.000		
S				1.000		
SF						1.000

SQ				1.000		
WM						

Table 4.8.2: The Structural Model

4.9 HYPOTHESIS TESTING ON PLS

The research hypotheses may be supported if the beta values are in accordance with the hypotheses direction, t-values, and p-value. In terms of confidence interval, which lower level (LL) and upper level (UL), it should not straddle or overlap at zero between the LL and UL (Hair et al., 2018). In the present analysis, a bootstrapping approach with resampling of 342 was used, in which the findings for the direct effect show that three hypothesis relationships were supported and two hypothesis relationship was not supported. Table below shows that the first hypothesis, reasonable price has a significant and positive impact on customer satisfaction, ($\beta = 0.125$, $t = 2.074$, $LL = 0.026$, $UL = 0.226$, $p < 0.019$). The second hypothesis, product quality has a significant and positive impact on customer satisfaction, ($\beta = 0.128$, $t = 1.685$, $LL = 0.004$, $UL = 0.253$, $p < 0.046$). Next, third hypothesis, service quality has a significant and positive impact on customer satisfaction, ($\beta = 0.225$, $t = 3.305$, $LL = 0.098$, $UL = 0.324$, $p < 0.001$). This is followed by the fourth hypothesis, security has a significant and positive impact on customer satisfaction, ($\beta = 0.129$, $t = 1.701$, $LL = 0.013$, $UL = 0.249$, $p < 0.045$). Table below indicates that five direct hypotheses developed for the model were significant; thus H1, H2, H3, and H4 were accepted and supported.

Table X : Hypothesis Testing

	Relationship	Std Beta	Std error	t value	p values	Confidence Interval		VIF	Decision
						LL	UL		
H1	RP→ CS	0.125	0.061	2.074	0.019	0.026	0.226	2.334	Supported
H2	PQ → CS	0.128	0.076	1.685	0.046	0.004	0.253	3.156	Supported
H3	SQ→CS	0.225	0.068	3.305	0.001	0.098	0.324	2.979	Supported

Table 4.9: Hypothesis Testing

4.10 SUMMARY

In this chapter, researcher had explained the data analysis which had been conducted for the customer satisfaction towards online shopping. Besides, reliability test, preliminary analysis, normality test and hypothesis testing had been carried out to get the result of data analysis for the relationship between independent variables (reasonable price, product quality, service quality and security) and dependent variable (customer satisfaction towards online shopping) among students of University Malaysia Kelantan.



CHAPTER 5: DISCUSSION AND CONCLUSION

5.1 Introduction

In this chapter the outline of the descriptive analysis will be further discussed after obtaining the outcome from the analysis of Chapter 4. On the other hand, the researcher compared an overall of the study with the objective which been set from the beginning of the study. Besides, there are more focused discussion in major finding about how the independent variables impacts the dependant variable, which is word-of-mouth. Moreover, in this chapter will also discuss the shortcomings that limit this research and present some recommendations for future research. An overall conclusion has been provided to get the clear picture as well as to summarise the whole research study.

5.2 Key findings

Research Question	Research Objective	Findings
What is the significant relationship between price and customer's word-of-mouth?	To examine the significant relationship between price and customer's word-of-mouth.	Referring to the result (Pearson Correlation), the relation between the reasonable price and word-of-mouth has a strong strength of correlation with the value ($r'=0.876$) and statistical significant with the value ($p'=0.000$).
What is the impact of product on customer's word-of-mouth?	To observe the impact of product on customer's word-of-mouth.	Based on the result, (Pearson Correlation), the relation between product quality and word-of-mouth has a strong strength of correlation with the value ($r'=0.898$) and with the statistical significant value of ($p'=0.000$).
What is the significant relationship of service quality on the	To investigate how the service quality has influenced on	According to the output, (Pearson Correlation), the relation between service

customer's word-of-mouth?	customer's word-of-mouth.	quality and word-of-mouth has a strong bond of correlation with the value ($r=0.883$) and with the statistical significant value of ($p=0.000$).
How does the security influence on customer's word-of-mouth?	To determine the significant relationship between security and customer's word-of-mouth.	As the result, (Pearson Correlation), the relation between security and word-of-mouth has a strong bond of correlation with the value ($r=0.884$) and with the statistical significant value of ($p=0.000$).

5.3 DISCUSSION

5.3.1 Reasonable Price

Research Objective 1: To examine the significant relationship between reasonable price and customer satisfaction recognition.

Research Question 1: What is the significant relationship between price and customer satisfaction recognition?

The first hypothesis predicted a positive and significant relationship between reasonable price and customer satisfaction recognition. Based on the Pearson Correlation Analysis, the results show that reasonable price is highly influences on customer satisfaction on online shopping. This refers to Pearson Correlation results that shows good positive correlation between independent variable which is reasonable price and dependent variable at $r = 0.876$, $p > 0.01$ are shown.

The first independent variable which is reasonable price with the statement "The product features can be considered the most valuable for its price" has the highest mean of 4.14. This is because University Malaysia Kelantan students can be said as customers that believe the word of mouth will provide them a useful information that leads to online shopping desire. Earlier research has identified trust and satisfaction as the primary determinants of word of mouth in foreign markets (Zhang et al,

2019).

5.3.2 Product Quality

Research Objective 2 : To observe the impact of product quality on customer satisfaction recognition

Research Question 2 : What is the impact of product quality on customer's satisfaction recognition? □

The second hypothesis predicted a positive and significant relationship between product quality and customer's satisfaction recognition. According to the Pearson Correlation Analysis, the results show that product quality is highly influences on customer satisfaction on online shopping. This refers to Pearson Correlation results that shows good positive correlation between independent variable which is product quality and dependent variable at $r = 0.898$, $p > 0.01$ are shown.

The second independent variable which is product quality with the statement "The quality of product are concerned from other customers' review and comments about the particular item" has the highest mean with 4.13. This is because University Malaysia Kelantan students as customers believe that product quality and can provides them satisfaction from word of mouth. Customers who are satisfied will return to purchase and they will begin word of mouth marketing and invite others. This result is supported by Baharch Ahmadinead (2019).

5.3.3 Service Quality

Research Objective 3 : To investigate how the service quality has influenced on customer satisfaction recognition.

Research Question 3 : What is the significant relationship of service quality on the customer satisfaction recognition?

The third hypothesis predicted a positive and significant relationship between service quality and customer's satisfaction recognition. According to the Pearson Correlation Analysis, the results show that service quality is highly influences on customer satisfaction on online shopping. This refers to Pearson Correlation results that shows good positive correlation between independent variable which is service quality and dependent variable at $r = 0.883$, $p > 0.01$ are shown.

The third independent variable which is product quality with the statement "Online stores offers varieties mode of services (life chats, SMS texting, self-service menus and so on)" has the highest mean from all five questions with 4.17. This is because University Malaysia Kelantan students as customers believe that service quality and can provides them satisfaction from word of mouth. The previous research focuses on customers perceptions of various aspects of service quality (Mukerjee, 2018).

5.3.4 Service Quality

Research Objective 4 : To determine the significant relationship between security and customer satisfaction recognition.

Research Question 4 : How does the security influence on customer satisfaction recognition?

The fourth hypothesis predicted a positive and significant relationship between security and customer's satisfaction recognition. Based on the Pearson Correlation Analysis, the results show that security is highly influences on customer satisfaction on online shopping. This refers to Pearson Correlation results that shows good positive correlation between independent variable which is security and dependent variable at $r = 0.884$, $p > 0.01$ are shown.

The fourth independent variable which is product quality with the statement "I will check for the security of the website stores and then only will proceed to pay". has the highest mean from all five questions with 4.40. This is because University Malaysia Kelantan students as customers believe that security and can provides them satisfaction from word of mouth. Online customers prefers to use websites that they believe are secure when the websites provide high level of security (A.S Al Adwan et al, 2020).

5.4 IMPLICATIONS OF THE STUDY

5.4.1 Managerial Implications

This study concentrated on four criteria that are frequently found to have a beneficial impact on customer satisfaction, reinforcing the relationship between reasonable prices, product quality, service quality and security in the context of online purchasing.

This research helps to improve the overall study of e-commerce industry in Malaysia. The findings of this study serve as a roadmap for online merchants as they develop their plans to boost customer happiness and grow their businesses. It is crucial that businesses consider the impact of all four aspects on customer satisfaction before developing new initiatives.

5.4.1.1 Reasonable price

When choosing where to shop, a consumer's primary consideration is always price. Consumers will evaluate a product's quality in relation to its quoted price. Online vendors need to be aware of their position, the value of their goods, and the market price for them. Extra costs, fees, and taxes were

undoubtedly a major issue for all parties. Moreover, the phrase "Free Shipping" appears to be quite sensitive in both this study and earlier studies. It was thought that offering free delivery would be more successful in drawing customers than offering a similar amount of a discount. Prior studies ranked high transportation costs as the primary factor affecting consumer happiness and the primary driver of online shopping (Laja, 2017).

5.4.1.2 Product quality

Product quality has always been one of the requirements to keep customers (STAFF, 2018). A high-quality product will satisfy customers, encourage them to buy more, and even recommend it to others. However, if a bad product is supplied, customers will be less satisfied and may occasionally seek alternatives. Online vendors must make sure the product is of the highest quality before delivery as well as that it is in brand-new condition when it reaches the customer. Selecting a reputable delivery service is another approach to guarantee product quality when it reaches the client. Online vendors occasionally made every effort to give the greatest goods possible, but the product was damaged during delivery. Due to process variability and the potential for product damage, delivery has a significant impact on the quality of the final product.

5.4.1.3 Service quality

The results of this study show a significant correlation between perceived service quality and SERVQUAL aspects. Higher levels of customer satisfaction in online buying are correlated with perceptions of higher service quality. However, the e-commerce sector continues to face significant challenges related to the lack of a robust human resource basis. The responsiveness aspect of service quality is greatly influenced by social media usage. In the post-pandemic environment, online vendors must improve their digital and social media marketing techniques in order to please their clients. Additionally, online retailers must maintain and develop staff members that treat customers with courtesy, friendliness, neatness, and communication.

5.4.1.4 Security

Security is the safeguard that an online retailer offers to a customer. It may take the shape of user authentication protection or personal data protection (Guo, 2012). Online shoppers won't feel secure making purchases at a website without security. Customers will feel comfortable and satisfied with good security. To achieve the required level of security, the online merchant must make a number of commitments. First and foremost, choosing the right online marketplace is crucial for an online

business to succeed. Online marketplaces with their own security system include Shopee, Lazada, and Shein. Customer satisfaction with security will increase if they use a platform that has a more trustworthy security mechanism (Schiff, 2013).

5.5 LIMITATION OF THE STUDY

This study has few limitations as the first one and it depends on responses from specific level of students so the perception of the students in other level of class can be different. The sample size was also limited for this study moreover the researcher generally focus on the students. A good sample size will help to create more appropriate output and more accurate findings. Although, the research findings provide some new insights to researcher, these findings should be viewed in light of some limitations. The study in this research is concentrating on those respondents who have some experiences in using online shopping.

Besides that, this questionnaire on this research that had been used were closed ended question with the Likert scale such as scale 1 until scale 5 which make the students to choose answer randomly. However, it is common to have some respondents who just answer the questionnaire without reading and understand the question properly. This can affect the data that the researcher need to calculate and this can also affect the variables as well and students that tick the lowest scale also can make the result getting worse which made the researcher hard to find an actual result.

The fact that university students made up the study population can also be viewed as a research limitation. University students typically share similar likes and lifestyles. This makes extrapolating the findings to a larger population more challenging. From this limitation, it is recommended that larger studies be conducted in the future to examine the relationship between customer satisfaction and reasonable prices, product quality, service quality, and security. There may be changes in the profession in a population made up primarily of millennials, which will almost certainly result in variances in preferences and lifestyles.

In this study, the researcher will use questionnaire method where it will be distributed through Google form and this method give limitations to researcher. This is because some of the respondents refuse to answer the questionnaire because they are more likely to do individual interview or focus group interview which highly recommended by past researcher on similar case studies. By doing the interview method compare to questionnaire method, the researcher will get more detailed information from the respondents and able to understand each respondent's perception on this study.

5.6 RECOMMENDATION

Based on findings, the independent variables which are reasonable price, product quality, service quality, and security has significant impact to dependent variable and moderate variable which are word by mouth and customer satisfaction toward online shopping among the students of Universiti Malaysia Kelantan. This study was conducted in only one place, namely Universiti Malaysia Kelantan, Pengkalan Chepa. For future studies, researchers are suggested to expand the area of the place to get a large population such as some areas of the district or state. A large population allows the researcher to get a large sample, which means getting a high number of respondents so that the results of the study can be improved.

In this study, the researcher only studied a few factor to produce the results studied such as reasonable price, product quality, service quality, and security. Therefore, future researchers are suggested to add other characteristics as variables to be studied such as consumer behavior, income, etc. to provide new insights to the readers. Furthermore, various studies of different variables can increase knowledge and improve the parties involved in online shopping.

Lastly, some respondents did not show interest in answering the questionnaire if the questionnaire was only distributed indirectly to the respondents. Therefore, future researchers are suggested to distribute the questionnaire directly to the respondents because it allows the researcher to get responses at the same time. Furthermore, distributing the questionnaire directly to respondents can also ensure that respondents are involved in responding.

5.7 OVERALL CONCLUSION OF THE STUDY

The main purpose of this research is to examine the relationship between reasonable price, product quality, service quality, security and customer's satisfaction in word of mouth. In Chapter 3 has mentioned the total numbers of the 342 respondents among the students in University Malaysia Kelantan. The population of respondent focused on University Malaysia Kelantan in Faculty of Business and Entrepreneurship students. Next, in Chapter 4 are the findings of result from the questionnaires survey that was analyse using frequency, descriptive, Pearson correlation analysis, and reliability test. The data obtained from the questionnaire has been evaluated by software program using Statistical Package for the Social Science (SPSS) and partial least square (SmartPLS). Lastly in Chapter 5 is about the summary of the results based on data analysis. Thus, all the hypothesis such as H1, H2, H3 and H4 stated are accepted. According

to the results, all independent variables which is reasonable price, product quality, service quality, security and customers satisfaction in word of mouth.

In addition, the results that have been studied show that students at Universiti Malaysia Kelantan are tech-savvy. With tech-savvy, they are easy and good at using certain platforms to shop online. Furthermore, they are easily influenced by social media and word of mouth about satisfaction in online shopping.

Finally, the outcome from this study can benefit all parties involved such as Shopee, Lazada and others to maintain customer satisfaction and improve customer satisfaction in using their services.

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APPENDIX A: SAMPLE OF QUESTIONNAIRE



FACULTY OF ENTREPRENEURSHIP AND BUSINESS (FKP) UNIVERSITY MALAYSIA KELANTAN

“FACTORS THAT AFFECTING CUSTOMER SATISFACTION TOWARDS ONLINE SHOPPING.”

Dear Respondents,

The researchers are undergraduate students of faculty of entrepreneurship and business from University Malaysia Kelantan (UMK). The purpose of this questionnaires is to understand about the influence of customer satisfaction toward the four variables of reasonable price, product quality, service quality, and security.

Please answer all questions to the best of your knowledge. All responses will be kept private confidential.

THANK YOU,

NITHIYASRI A/P THIRUMURTHILU (A19B0418)

KOMATHI A/P TIAGOO (A19A0224)

NUR AMIRAH NABILAH KAMARUDIN (A19A1087)

PUTERI ANIS NATASYA BINTI MEGAT ZABERI (A19A0795)

SECTION A: DEMOGRAPHIC PROFILE

Please tick on one answer in the relevant box for each of the following statements:

Tandakan hanya satu jawapan di kotak yang berkenaan untuk setiap pernyataan berikut:

1. Gender / Jantina

Male/Lelaki

Female/Perempuan

2. Race / Bangsa

Malay/Melayu

Chinese / Cina

Indian / India

Other/ lain- lain

3. Course year / Tahun kos

First year / tahun pertama

Second year / tahun kedua

Third year / tahun ketiga

Fourth year / tahun keempat

4. Courses / Kos

SAA

SAB

SAE

SAK

SAL

SAR

SECTION B: THE INFLUENCE OF CUSTOMERS SATISFACTION ON REASONABLE PRICE .

Instruction: Please rate each item in this section with the Like at scale of 1 to 5. The scale number 1 indicates strongly disagree while 5 is being strongly agree. Please tick (/) one of the suitable answer at the space given.

Arahan: Sila nilaikan setiap item di dalam bahagian ini dengan skala like 1 hingga 5. 1 merupakan sangat tidak setuju manakala 5 merupakan sangat setuju. Sila tandakan satu jawapan yang sesuai di ruang yang disediakan.

1.	Strongly Disagree/ Sangat tidak setuju
2.	Disagree/ Tidak setuju
3.	Neutral/ Natural
4.	Agree/ Setuju
5.	Strongly Agree/ Sangat setuju

	1	2	3	4	5
The price of the product in online shopping are affordable.					
The price of branded products are much more expensive then the local brands in ecommerce.					
The ideal price of an electronic sold in online is affordable.					
The product features can be consider as the most valuable for its price.					
The prices of the products sold in online shopping are based to the economic pricing.					

SECTION C: THE INFLUENCE OF CUSTOMERS SATISFACTION ON PRODUCT QUALITY.

Instruction: Please rate each item in this section with the Like at scale of 1 to 5. The scale number 1 indicates strongly disagree while 5 is being strongly agree. Please tick (/) one of the suitable answer at the space given.

Arahan: Sila nilaikan setiap item di dalam bahagian ini dengan skala like 1 hingga 5. 1 merupakan sangat tidak setuju manakala 5 merupakan sangat setuju. Sila tandakan satu jawapan yang sesuai di ruang yang disediakan.

1.	Strongly Disagree/ Sangat tidak setuju
2.	Disagree/ Tidak setuju
3.	Neutral/ Natural
4.	Agree/ Setuju
5.	Strongly Agree/ Sangat setuju

	1	2	3	4	5
I prefer to shop online because varieties of product can be found and choose easily.					
Products in online stores are kept in good care.					
I am satisfied with the quality of product.					
The products were sold and sent in a suitable and proper wrapping.					
The quality of product are concerned from other customers' review and comments about the particular item.					

SECTION D: THE INFLUENCE OF CUSTOMERS SATISFACTION ON SERVICE QUALITY

Instruction: Please rate each item in this section with the Like at scale of 1 to 5. The scale number 1 indicates strongly disagree while 5 is being strongly agree. Please tick (/) one of the suitable answer at the space given.

Arahan: Sila nilaikan setiap item di dalam bahagian ini dengan skala like 1 hingga 5. 1 merupakan sangat tidak setuju manakala 5 merupakan sangat setuju. Sila tandakan satu jawapan yang sesuai di ruang yang disediakan.

1.	Strongly Disagree/ Sangat tidak setuju
2.	Disagree/ Tidak setuju
3.	Neutral/ Natural
4.	Agree/ Setuju
5.	Strongly Agree/ Sangat setuju

	1	2	3	4	5
The store's website pages were easy to use and easy to access on the categories of product during purchase.					
The online stores website page will be updated in certain times and improve their services.					
The online stores provide more efficient, quick, and friendly customer services.					
Online stores offers varieties mode of services (live chats, SMS texting, self-service menus and so on)					

Online stores provide a correct and a clear shipment number and notification to track the parcel in online.					
---	--	--	--	--	--

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SECTION E: THE INFLUENCE OF CUSTOMERS SATISFACTION TOWARD SECURITY

Instruction: Please rate each item in this section with the Like at scale of 1 to 5. The scale number 1 indicates strongly disagree while 5 is being strongly agree. Please tick (/) one of the suitable answer at the space given.

Arahan: Sila nilaikan setiap item di dalam bahagian ini dengan skala like 1 hingga 5. 1 merupakan sangat tidak setuju manakala 5 merupakan sangat setuju. Sila tandakan satu jawapan yang sesuai di ruang yang disediakan.

1.	Strongly Disagree/ Sangat tidak setuju
2.	Disagree/ Tidak setuju
3.	Neutral/ Natural
4.	Agree/ Setuju
5.	Strongly Agree/ Sangat setuju

	1	2	3	4	5
I'm confident in using a secured platform.					
I trust to give my personal details in online platform during the payment process.					
Many customers will repeat doing online purchase because it is safe and easy to use.					
The purchased details and chatting messages between the sellers and the buyers are encrypted.					

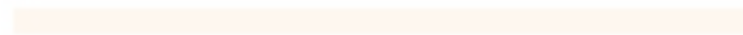
I will check for the security of the website stores and then only will proceed to pay.

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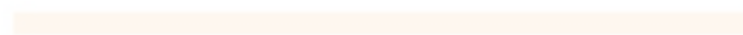
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SECTION F: CUSTOMERS SATISFACTION ON ONLINE SHOPPING

Instruction: Please rate each item in this section with the Like at scale of 1 to 5. The scale number 1 indicates strongly disagree while 5 is being strongly agree. Please tick (/) one of the suitable answer at the space given.

Arahan: Sila nilaikan setiap item di dalam bahagian ini dengan skala like 1 hingga 5. 1 merupakan sangat tidak setuju manakala 5 merupakan sangat setuju. Sila tandakan satu jawapan yang sesuai di ruang yang disediakan.

1.	Strongly Disagree/ Sangat tidak setuju
2.	Disagree/ Tidak setuju
3.	Neutral/ Natural
4.	Agree/ Setuju
5.	Strongly Agree/ Sangat setuju

	1	2	3	4	5
The differences between customer expectation and actual products would effect in the satisfaction.					
Fast delivery gives me satisfaction.					
Website design that is not organized can make my satisfaction decrease.					

The seller's speed in replying to the chat can give me satisfaction.					
I am very satisfied when the item I bought arrived in an undamaged condition.					

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SECTION G: CUSTOMERS SATISFACTION VIA CUSTOMERS WORD BY MOUTH

Instruction: Please rate each item in this section with the Like at scale of 1 to 5. The scale number 1 indicates strongly disagree while 5 is being strongly agree. Please tick (/) one of the suitable answer at the space given.

Arahan: Sila nilaikan setiap item di dalam bahagian ini dengan skala like 1 hingga 5. 1 merupakan sangat tidak setuju manakala 5 merupakan sangat setuju. Sila tandakan satu jawapan yang sesuai di ruang yang disediakan.

1.	Strongly Disagree/ Sangat tidak setuju
2.	Disagree/ Tidak setuju
3.	Neutral/ Natural
4.	Agree/ Setuju
5.	Strongly Agree/ Sangat setuju

	1	2	3	4	5
I will buy the products again from the same song if I satisfied with it.					
I will buy a product when my friend tells me the product is very satisfactory.					
I will buy the product when I see good feedback from other customers.					
I will buy things that get a lot of attention. (viral product).					

I was influenced to buy goods from the application without regard for quality.

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APPENDIX B: GANTT CHART

No	Activities / Week	OCT 2022		NOV 2022				DEC 2022			JAN 2022			
		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Determination of students and supervisors by the PPTA Course Coordinator according to student registration and specialization													
2	Final Year Research Project Briefing I and II Distribution of Final Year Research Project Guidelines / online													
3	Meetings and discussions with Supervisors – Verification of the appropriate field/title of the research project													
4	Writing a draft of a Research Project Proposal													
5	– Submission of draft Research Project Proposal to Supervisor Review by Supervisor Correction by students													
6	Submission of two (2) Research Project Proposal Reports to the PPTA supervisor and examiner													
7	Presentation and assessment													
8	Data collection													
9	– Data analysis – Writing a draft of a research project – Findings report – Interpretation and discussion of findings – Implications of the findings – Conclusion													
10	– Submission of draft research project results to the Supervisor – Turnitin filter – Review by Supervisor Correction of research project report that has been reviewed by the Supervisor													
11	Submission of two (2) copies of the final report of the research project without a volume together with the Turnitin result slip to the coordinator													
12	Presentation and evaluation of the final report of the research project													
13	Submission of one (1) copy of the final report of the bound research project to the supervisor of the specialization													

APPENDIX C: SPSS RESULT

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
I will buy the products again from the same store if I satisfied with it	342	1	5	4.13	1.156
I will buy a product when my friend tells me the product is very satisfactory	342	1	5	4.08	1.190
I will buy the product when I see good feedback from other customers	342	1	5	4.22	1.165
I will buy things that get a lot of attention. (viral product)	342	1	5	3.87	1.267
I was influenced to buy goods from the application without regard for quality (Tiktok, Shopee, Lazada dan sbg.)	342	1	5	3.77	1.351
Valid N (listwise)	342				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
The price of the product in online shopping are affordable	342	1	5	4.02	1.210
The price of branded products are much more expensive then the local brands in ecommerce	342	1	5	4.02	1.333
The ideal price of an electronic sold in online is affordable.	342	1	5	4.13	1.242
The product features can be considered the most valuable for its price	342	1	5	4.14	1.201
The prices of the products sold in online shopping are based to the economic pricing	342	1	5	4.11	1.211
Valid N (listwise)	342				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
I prefer to shop online because varieties of product can be found and choose easily	342	1	5	4.05	1.170
Products in online stores are kept in good care	342	1	5	4.09	1.240
I am satisfied with the quality of product	342	1	5	4.09	1.198
The products were sold and sent in a suitable and proper wrapping	342	1	5	4.08	1.211
The quality of product are concerned from other customers' review and comments about the particular item	342	1	5	4.13	1.173
Valid N (listwise)	342				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
The store's website pages were easy to use and easy to access on the categories of product during purchase	342	1	5	4.08	1.196
The online stores website page will be updated in certain times and improve their services	342	1	5	4.11	1.203
The online stores provide more efficient, quick, and friendly customer services	342	1	5	4.13	1.186
Online stores offers varieties mode of services (life chats, SMS texting, self-service menus and so on)	342	1	5	4.17	1.205

Online stores provide a correct and a clear shipment number and notification to track the parcel in online	342	1	5	4.15	1.173
Valid N (listwise)	342				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
I'm confident in using a secured platform	342	1	5	4.14	1.185
I trust to give my personal details in online platform during the payment process	342	1	5	4.07	1.266
Many customers will repeat doing online purchase because it is safe and easy to use	342	1	5	4.07	1.197
The purchased details and chatting messages between the sellers and the buyers are encrypted	342	1	5	4.12	1.193
I will check for the security of the website stores and then only will proceed to pay	342	1	5	4.40	.843
Valid N (listwise)	342				

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.585	.106		5.502	.000
	Price	.840	.025	.876	33.488	.000
2	(Constant)	.378	.098		3.853	.000
	Price	.250	.068	.261	3.656	.000
	Product quality	.640	.070	.652	9.139	.000
3	(Constant)	.368	.099		3.725	.000
	Price	.220	.076	.229	2.877	.004
	Product quality	.581	.096	.592	6.076	.000
	Service quality	.091	.101	.093	.898	.370
4	(Constant)	.195	.108		1.810	.071
	Price	.155	.077	.162	2.019	.044
	Product quality	.507	.096	.516	5.276	.000
	Service quality	-.052	.106	-.054	-.493	.622
	Security	.320	.087	.297	3.686	.000

a. Dependent Variable: Word by mouth

Descriptive Statistics

	Mean	Std. Deviation	N
Word by mouth	4.02	1.103	342
Price	4.08	1.151	342
Product quality	4.09	1.123	342
Service quality	4.13	1.128	342
Security	4.16	1.026	342

Correlations

		Word by mouth	Price	Product quality	Service quality	Security
Word by mouth	Pearson Correlation	1	.876**	.898**	.883**	.884**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	342	342	342	342	342
Price	Pearson Correlation	.876**	1	.944**	.950**	.933**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	342	342	342	342	342
Product quality	Pearson Correlation	.898**	.944**	1	.967**	.943**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	342	342	342	342	342
Service quality	Pearson Correlation	.883**	.950**	.967**	1	.952**

	Sig. (2-tailed)	.000	.000	.000		.000
	N	342	342	342	342	342
Security	Pearson Correlation	.884**	.933**	.943**	.952**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	342	342	342	342	342

** . Correlation is significant at the 0.01 level (2-tailed).

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Word by mouth	.211	342	.000	.799	342	.000
Price	.257	342	.000	.737	342	.000
Product quality	.270	342	.000	.731	342	.000
Service quality	.289	342	.000	.718	342	.000
Security	.245	342	.000	.750	342	.000

a. Lilliefors Significance Correction

APPENDIX D: SMART PLS RESULTS

	Cronbach's Alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
PQ	0.965	0.967	0.973	0.878
RP	0.961	0.970	0.969	0.864
S	0.937	0.939	0.953	0.803
SF	0.827	0.828	0.878	0.591
SQ	0.971	0.971	0.977	0.895
WM	0.942	0.954	0.955	0.811

Table 4.8: Reliability test

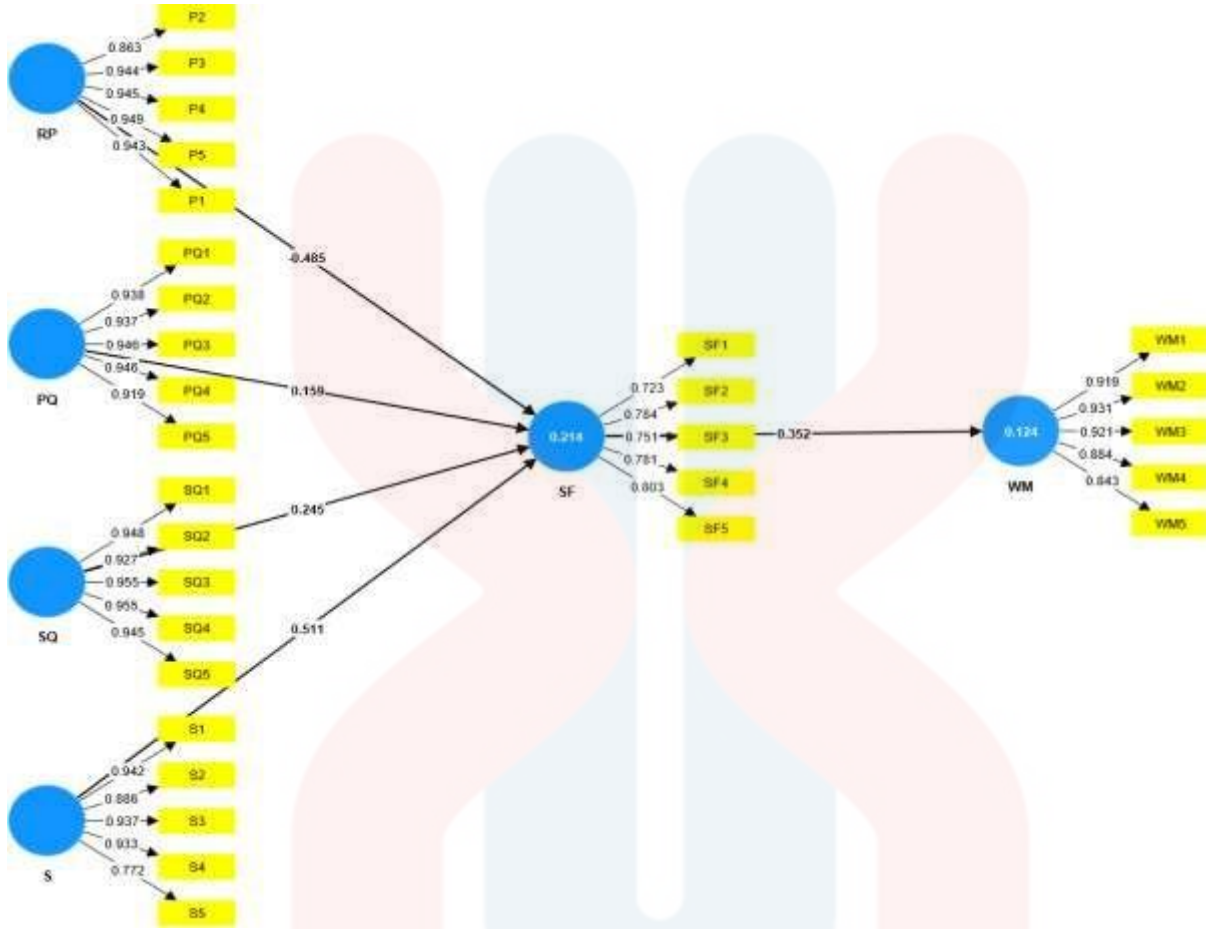


Figure 4.8: Measurement Model

	PQ	RP	S	SF	SQ	WM
PQ						
RP	0.981					
S	0.985	0.979				
SF	0.463	0.415	0.500			
SQ	0.999	0.985	0.993	0.468		
WM	0.946	0.927	0.940	0.393	0.929	

Table 4.8.1: Discriminant Validity using HTMT criterion

	PQ	RP	S	SF	SQ	WM
PQ				1.000		
RP				1.000		
S				1.000		
SF						1.000
SQ				1.000		
WM						

Table 4.8.2: The Structural Model

Table X : Hypothesis Testing

Relationship	Std Beta	Std error	t value	p values	Confidence Interval		VIF	De
					LL	UL		
H1 RP→ CS	0.125	0.061	2.074	0.019	0.026	0.226	2.334	Su
H2 PQ → CS	0.128	0.076	1.685	0.046	0.004	0.253	3.156	Su
H3 SQ→CS	0.225	0.068	3.305	0.001	0.098	0.324	2.979	Su

Table 4.9: Hypothesis testing

GROUP 11 PPTA2

ORIGINALITY REPORT

29%	20%	7%	18%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Universiti Malaysia Kelantan Student Paper	6%
2	discol.umk.edu.my Internet Source	4%
3	media.neliti.com Internet Source	1%
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6	myscholar.umk.edu.my Internet Source	1%
7	journal.umk.edu.my Internet Source	1%
8	Submitted to UOW Malaysia KDU University College Sdn. Bhd Student Paper	1%
9	Submitted to Anglia Ruskin University Student Paper	1%