

DETERMINANTS OF CONSUMER TRUST IN
E-COMMERCE

BY

CHIA CHEE EN
FOO YI CHENG

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- (2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
- (3) Equal contribution has been made by each group member in completing the research project.
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Name of Student:	Student ID:	Signature:
1. <u>Chia Chee En</u>	<u>1506057</u>	_____
2. <u>Foo Yi Cheng</u>	<u>1505026</u>	_____

Date: 20th April 2018

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DEDICATION

With the completion of this particular research project of ours, we would like to dedicate this to our family members and our friends who have given full support and motivation in the settlement of this written research project. This research project is also dedicated to our parents who have supported and encouraged us in further striving on our academics in Universiti Tunku Abdul Rahman (UTAR).

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LIST OF ABBREVIATIONS

UTAR	University Tunku Abdul Rahman
PLS	Partial Least Squares Path Modelling
AVE	Average Variance Extracted
CR	Composite Reliability
BR	Brand Recognition
SQ	Service Quality
CS	Customer Satisfaction
S	Security
WOM	Word-of-mouth Communication
CT	Consumer Trust
L	Loyalty
PI	Purchase Intention

PREFACE

In order to successfully complete the study of Bachelor Degree of International Business (HONS) in Universiti Tunku Abdul Rahman, it is necessary for us to conduct a well research project. Half year duration was needed in order to complete this research with quality and reliability. The topic of this research study is **Determinants of Consumer Trust in E-commerce**. Due to rapid growth of e-commerce in this era, it has impacted a lot of Malaysians in every way. It is ultimately significant for us to understand on the relationship between the determinants that will affect consumer trust and also on the relationship between consumer trust and loyalty, and not forgetting purchase intention too. This title is best suitable and consorts for our team as e-commerce platform is something that many individuals are looking into and planning to venture into.

The overall research study will provide a deeper and clearer understanding on the determinants consist of **brand recognition, service quality, customer satisfaction, security, word-of-mouth communication of consumer trust** in e-commerce and the results of consumer trust that will lead to **loyalty and purchase intention** among Malaysians. This study will contribute to future researchers and also individuals who would want to venture into e-commerce platform. Hence, the research project could provide a deeper view to all individuals.

ABSTRACT

This study is aimed to investigate the determinants of consumer trust in e-commerce in Malaysia. To specifically examine the in depth of determinants of consumer trust and issues related to the research topic has been discussed. This study is designed to achieve the following objectives: (1) To determine the relationship between brand recognition and consumer trust; (2) To identify the relationship between service quality and consumer trust; (3) To examine the relationship between customer satisfaction and consumer trust; (4) To study on the relationship between security and consumer trust; (5) To study on the relationship between word-of-mouth communication and consumer trust; (6) To examine the relationship between consumer trust and loyalty and (7) To determine the relationship between consumer trust and purchase intention.

Personal distributed questionnaire method and online questionnaire method were selected as a tool to conduct and collect samples. Target populations are Malaysian individuals whom have purchased online recently of age 18 and above. In addition, Partial Least Square (PLS) Path Modeling was used to generate the data and to conduct tests inclusive of reliability, validity and discriminant validity. Throughout the research, the results have shown that variables such as brand recognition, service quality, security, word-of-mouth communication, consumer trust, loyalty and purchase intention have significant relationships with one another. Customer satisfaction shows no significance in the results.

To conclude this research, the summary of descriptive analysis, discussion of major findings, implication of the study and the limitation of the study will be discussed in this research study. There are also has several recommendations highlighted to overcome and potential improvement area for future study.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

This chapter is consisting of 8 sections. The sections are inclusive of the research background, problem statement, research questions, research objectives, hypothesis and significance of the research, outline of the chapter and conclusion. The research background is about the consumer trust in e-commerce. Problem statement follows after research background. The research objectives are identified to examine the relationship between endogenous and exogenous variables. Other than that, the research questions are determined and hypotheses are formed in the research. The significance of this research is presented too.

1.1 Research Background

E-commerce transactions are involving the sales of products and services online which has been growing rapidly in the past years (Wang, Wang, & Liu, 2016). E-commerce, also called as electronic commerce in long form, is the intercommunication between the systems of data management, communication systems and security, whereby they exchange business activities information relating the sale product or services. Therefore, the main definition and main components of electronic commerce are inclusive of the systems of communication, data management systems and security (Garrett & Skevington, 2013). Other than that, electronic commerce has become a great part and given a huge impact to thousands of businesses throughout the world (Yean Sien, & Falahat, 2015). Instead of sending and receiving paper documents, companies can now exchange information electronically by having to combine the functional capabilities of computers and telecommunication systems. By doing so, the businesses these days are achieving astonishing and unprecedented improvements in the precision, pace, and productivity with which commercial transactions may be discussed, confirmed and performed (Ritter, 1992). The internet is a nearly ideal market because information is quick and direct and buyers can make comparison on the offerings of sellers worldwide.

This leads to a result of fierce price competition, diminishing product differentiation and vanishing brand loyalty (Brynjolfsson & Smith, 2000).

In the last few years, enterprises and businesses in every part of the world have experienced different changes in their business information system. The enterprises and businesses have never stop struggling from getting timely information that is needed and important to make effective and efficient business decision and to ensure continuous growth of enterprises. This struggle has continued to happen though huge investments were made. Discoveries were found and seemed to be the magic prescription for unending story of success and rapid returns for enterprises and businesses. It is by placing an “e” in front of any process or function. For example, e-commerce. E-commerce is a necessity for modern business and also to other organization and it is a paperless exchange of business information by using the following ways which are the electronic data and information exchange, electronic mail system, electronic bulletin, electronic money transfer and more (Joshi, 2017). The invention of electronic commerce which is also called as e-commerce has resulted in becoming one of the most popular activities on the web. It has then created many benefits for enterprises, businesses and users, one of the benefits is users get to shop online 24/7 which brings to a meaning that there is no time limit for users to buy products online (Yean Sien, & Falahat, 2015). It has also then decrease transaction costs, enterprises and businesses get to conduct their business easily and every user get to compare the prices easily among the various websites. Other than the advantages that were mentioned above, there are some limitations and barriers to it. When one is lacking of knowledge in using of electronic commerce and internet network, consumer rights protection in electronic commerce, low security in electronic transferring of funds and more are the barriers to e-commerce that both the enterprises and consumers face (Garrett & Skevington, 2013).

Various of technologies are used in electronic commerce which inclusive of credit cards, email and electronic fund transfers. These technologies are used when the customers have purchased products and they make payment online. In order to collect information, the website is the best way to do so and also to do purchasing through internet. The information has and still is playing a significant role in e-commerce. Some of the websites that the customers have been using derive income by offering products or

services for sale. Just by entering credit card or other payment information on the website, the products can be purchased on the website itself. In order for a website to be successful and to be attractive to customers, there are two important roles for websites. First of all, it is the varieties of information as well as the type of information on the website and the sufficiency of the information. The next important role is the website design. It is equally as important as the first role. These roles have brought a great impact to the websites and the businesses too as it leads to e-convenience which allows companies in achieving their final target to e-commerce success of companies (Salehi, Abdollahbeigi, Langroudi, & Salehi, 2012).

1.2 Problem Statement

Electronic commerce has been growing rapidly and it has become a practical reality for thousands of businesses throughout the world (Yean Sien, & Falahat, 2015). Companies can now easily exchange the information through internet and this has in turn brought great benefits to all the consumers and the businesses instead of sending and receiving paper documents (Ritter, 1992). One of the major factors that has been influencing the successful proliferation of e-commerce, has been identified by major corporations, the Federal Administration and the Better Business Bureau, is the trust of people in Internet vendors. For example, the consumers do not have trust in companies that have their goods sold through the World Wide Web interface. In another word that Better Business Bureau has phrased is it is necessary for businesses to promote trust and confidence of the consumers on the internet (Gefen, 2000). The major reason huge amount of people do not buy online that was claimed by the Better Business Bureau is their worries and concern regarding online payments security, reliability of companies and the lack of privacy and policy. Trust has played a significant role in uncountable social and economic interactions involving unreliability and dependency. Since unpredictability appear in transactions over the internet, many researchers have found and stated that trust is a critical factor influencing the successful proliferation of e-commerce (Teo & Liu, 2007).

Trust is a critical issue for any long-term business relationship. It is vital wherever risk, unpredictability and/ or interdependence exist. All web vendors or businesses are very

interested in building exchange relationships with consumers or customers. The important predecessors for the exchange relationship to continue on are the belief of the consumers and intentions related to trust in the web vendor or business. Anyhow, this belief is depending on the level of risk perceived by consumers as well as their level of control on the information that is perceived that they must and should exchange with the web vendor or business (Jennings & Seaman, 1990).

Analysts predicted that by year 2011, online e-commerce sales would account for only 7%. Therefore, a load more improvement is needed for the Internet in achieving the potential due to reluctance of consumers to engage in its use. The lack of trust in the consumers is the important factor. It is one of the foundation requirements in order to establish online exchange relationships. In order to purchase online, website is the medium of transaction. The consumer's perception of technology will technically affect the good use of the internet as website is an IT application (Prashant Palvia, 2009).

Among of all the other variables or factors, trust has been discovered to be a key predictor for customer retention due to it critical ability to promote risk-taking behaviour in the case of uncertainty, which is also unpredictability, interdependent and fear of opportunism (Echanisms, Mccole, Ramsey, & Lim, 2014).

Therefore, this research studies on the consumers who have purchased online recently and to identify the determinants consisting of brand recognition, service quality, customer satisfaction, security and word-of-mouth communication which show significant relationship with trust in purchasing online.

1.3 Research Objectives

The main purpose circulated from the problem statement can help in determining the features affecting the loyalty and purchase intention of the consumers.

1.3.1 General Objectives

In this section, it describes on the purpose of doing research on a general basis. It is to determine the determinants affecting consumer trust in e-commerce. Trust may lead the consumers in their brand loyalty and purchase intention.

1.3.2 Specific Objectives

1. To determine the association between brand recognition and consumer trust.
2. To identify the association between service quality and consumer trust.
3. To examine the association between customer satisfaction and consumer trust.
4. To study on the association between security and consumer trust.
5. To study on the association between word-of-mouth communication and consumer trust.
6. To examine the association between consumer trust and loyalty.
7. To determine the association between consumer trust and purchase intention.

1.4 Research Questions

1. To what extend do brand recognition affect consumer trust?
2. To what extend do service quality affect consumer trust?
3. To what extend do customer satisfaction affect consumer trust?
4. To what extend do security affect consumer trust?
5. To what extend do word-of-mouth communication affect consumer trust?
6. To what extend do consumer trust affect loyalty?
7. To what extend do consumer trust affect purchase intention?

1.5 Hypotheses of the Study

- H1: There is a significant association between brand recognition and consumer trust.
- H2: There is a significant association between service quality and consumer trust.
- H3: There is a significant association between customer satisfaction and consumer trust.
- H4: There is a significant association between security and consumer trust.
- H5: There is a significant association between word-of-mouth communication and consumer trust.
- H6: There is a significant association between consumer trust and brand loyalty.
- H7: There is a significant association between consumer trust and purchase intention.

1.6 Significance of the Study

The goal of this research is to study on the determinants of consumer trust on e-commerce. The objective is to find out the factors that motivate consumer to keep purchasing online and remain loyal with the brand. Other than that, the objective is also to find out the factors behind purchase intention of the consumers too. The target market is consisting of every consumer who purchase online recently in any e-commerce platform. The intention behind this is to find out the causes that keeps getting the consumers in purchasing online. Causes such as brand recognition, service quality, customer satisfaction, security and word-of-mouth communication. Besides that, this research was done and understood the factors of consumer trust in e-commerce in the past. This research has helped those who have the intention to start up a business regarding e-commerce to come out a creative marketing strategy in order to attract more consumers in purchasing their products. In order to attract the consumers and having the consumers to be brand loyal, it is ultimately important to understand the thinking and perception of the consumers.

Through this research, we will be able to discover on the factors that bring out consumer trust and having trust will lead to brand loyalty and purchase intention. Most importantly, the perceptions behind these factors build up the trust that bring consumers in continue purchasing the products. The e-commerce platform creates different factors that have different effect on the trust of the consumers. Through this, it enables more

understanding on the demand of the consumers and to satisfy their needs. Besides that, the marketers will have the idea of retaining their loyal customer through the trust that has been built in consumers' mind and to attract more new customers.

The main objective of this research is the factors that have contributed in moulding and building consumers' trusts in purchasing online. In order for the consumers to purchase online, a few determinants have motivated and allowed to do so and in order to place trust in online transaction and the security that is promised within it. It is utmost significant for this research to find out the causes behind all the determinations and the factors leading to trust in order to create brand loyalty and purchase intention.

1.7 Chapter Layout

This research is done based on few other chapters too which are chapter 2 on literature review, chapter 3 on methodology, chapter 4 on data analysis and chapter 5 is on discussion, conclusions and implications.

Chapter 2: Literature Review

A schematic diagram developed in this chapter basically is to identify the dependent, mediating and independent variables. The review of the literature explained on the variables that will affect the consumer trust in e-commerce which are brand recognition, service quality, customer satisfaction, security and word-of-mouth communication. Through all these determinants of consumer trust, it will lead to brand loyalty and purchase intention. Other than that, the hypotheses on the determinants which are the independent variables having a significant relationship on consumer trust will be examined in this chapter. Hypotheses on mediating variable bringing effect to dependent variables will be discussed too.

Chapter 3: Methodology

The methodology is inclusive of research design, data collection methods, sampling design, research instrument, construct measurement, data processing and data analysis

is conducted in this chapter. Methodology describes on the techniques used to collect data and the methods of data collection that are used in the research.

Chapter 4: Data analysis

Chapter 4 talks about the outcome that are collected from the questionnaire. A software by the name of Partial Least Square (PLS) path modelling is used to examine all data that are collected. The results of the analysis will be presented in the tables and chart which is illustrated by PLS.

Chapter 5: Discussion, conclusions and implications

In chapter 5, it shows the summary of the research findings, statistical analysis and discussions of major findings. Implications of studies is included in this chapter too. Other than that, the limitations and recommendation are discussed in this chapter.

1.8 Conclusion

To conclude, summary of the research is presented in Chapter 1. It is an overview of the research inclusive of research background and problem statement. It also identified the research objectives, research questions, hypotheses of the study and significance of study. A further review on literature review is being discussed in the next chapter.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

The comprehensive review of the published and unpublished information for e-commerce consumer trust in Malaysia have stated in this chapter 2. In this research multiple researches from other research and secondary data had used it as reference to define the variables in order to develop a related schematic diagram for current research. Finally, the hypotheses testing is to be carried out to explain the interrelationship between the variables.

2.1 Review of the Literature

There is a deficiencies literature pertaining to e-trust. There is a lack of consumer trust in e-commerce but focusing more on purchase intention and loyalty.

2.1.1 Loyalty

Reichheld and Schefter (2000) has stated that e-loyalty is based on on-time delivery, quality customer relations, compelling product presentations, convenient and easily affordable shipping and handling, and privacy policies which are most trustworthy and tailored for convenience. Customer loyalty is an element of relationship marketing. If an organization is not able to keep customer retention and establish close relations with customers, it will not be able to go forward in the operation of consistent transactions. However, customers do not remain with an online website just because of the discounts offered but the loyalty programme offered by such websites (Asim, 2005). The facilitating information technologies have been implemented to improve the frequency of customer retention, which tends to correlate positively with online customer loyalty (Chen, Yen, Pornpriphet, & Widjaja, 2015).

E-loyalty is the purchasers' most favoured practice within the e-commerce platform, resulting in recurring traffic for such businesses. Business to Consumer (B2C) is a significant pathway to build loyal customer based to an online website. Many B2C e-business models that we see today have relied solely on an intensive effort to generate a large reoccurring customer base in an effort in achieving a consistent profitability rate based on "lifetime revenue potential" from each loyal customer (Porter, 2011). According to Baldinger and Rubinson (1997), the loyal buyers tend to stay remain to a certain online website if their practices towards the particular e-commerce website is positive. Besides, the ability to convert a switching buyer into a loyal buyer is higher if the buyer has a positive and favourable attitude towards the online website (Gommans, Krishnan, & Scheffold, 2001).

Customer loyalty is an important procedure in the success of the organisation therefore customer loyalty becomes the priority especially when customer feels insecure with this online shopping platform. Besides, loyal customers are looking to past service experiences positively as supposed to non-loyal customers, creating additional advantage for advertising by word-of-mouth without any cost to the service provider. Customer loyalty occurs when a customer repeatedly buys a product or service from certain online website. That bring the meaning that the customer holds positive feedback toward the online website. In online shopping, e-loyalty expresses customer positive attitude towards the retailer or online shopping website that result in repeat purchase behaviour. Customer loyalty depends on how the online website retain customers and the ability to overthrow other competitors' efforts to persuade customers switching into competing products or services. (Pratminingsih, Lipuringtyas, & Rimenta, 2013).

However, retentive e-customer loyalty is vital in an online business in order for consistent customer traffic. Two behavioural impact of loyalty were identified as word-of-mouth and willingness to pay more (Srinivasan, Anderson, & Ponnayolu, 2002). E-loyal customers are profitable because e-loyalty will mitigate customers' propensity to be price sensitive and recommend others to visit a certain website which will lead to more transactions (Jeon & Jeong, 2016).

Therefore, the price changes and the customer propensity will affect the degree of customer loyalty toward an online website.

2.1.2 Purchase Intention

According to Dachyar & Banjarnabor (2017), purchase intention is defined as the buyer intends to involve in the exchange relationship at online website, such as information sharing, maintaining relationship with customer and creating business transactions. Online purchase intention is based on the relationship between behavioural intention and actual behaviour. Action in behavioural intention of individual will determine the actual individual behaviour. Therefore, purchase intention to certain online websites is a factor that predicts the actual behaviour or the purchase decision of customers (Kim, Ferrin, & Rao, 2008). The research explored that online purchase intention is an appropriate measurement for intention to use the website because online transaction contains information sharing process and actual purchase so that online purchase intention is depending not only on one factor (Pavlou, 2003).

Online purchase intention is the consumer's willingness to use online technology to purchase products (Chin, 2017). Behavioural intention can be defined as consumers who have positive or negative attitude towards particular product or service, it will influence the purchase intention to perform the targeted behaviour (Davis, Fred D.Bagozzi, Richard P.Warshaw, 1989). Consumers who like to purchase through online website when they have a favourable attitude (Chin, 2017). Additionally, consumers like to use new technology when they beliefs that it will increase their work performance. Consumer's purchase intention is a crucial factor in determining the consumer's online shopping behaviour (Chin, 2017).

The study of Luo & Lee (2015) stated that online consumers are often sceptical about the eminence of products because they are unable to physically see and touch the real products, and there is really no way of verifying the details of the

sellers. The actual volume of sales involving the consumer's decision to further the purchase varies with the constraints brought forward by the situation mentioned above. Online customers behaviour do not always correspond to the original intentions on the sale. If a product seems highly reasonable, then a customer would be positive for a purchase. By distinction, if the product doesn't appear reasonable because the quality of said product is low or an unreasonable price, the purchaser would feel negatively towards making a purchase. The bias within the consumers for high quality products for a low price are vibrant without argument.

According to Lu, Chang & Chang (2014), purchase intention is a consumer's intention to purchase a product. Purchase intention as a consumer's cognizant plan or intention to take an action and purchase a product (Spears & Singh, 2004). Besides that, online purchase intention focuses on whether consumers are willing to buy a particular product via e-commerce platforms (Pavlou, 2003). This study thus suggests that purchase intention is a consumer's willingness to buy a given product at a specific time or in a specific situation.

2.1.3 Service Quality

The study of Za, S. Z., Hudayah, S., Hidayati, T., & Kalimantan, E. (2016) stated that the analysis of the service quality which was determined by the information provided by the service provider, transaction system and help desk. Online website as the service provider offered complete information for the customers, transaction system by using share account for secure transaction and complete help desk. Besides, a good e-commerce can influence the interest of customers. In line with statement that good customer service is the indispensable source in any online business because the good service quality will increase customer's satisfaction and customer loyalty. According to another research explained that customer interested in buying something started from their trust and the brand (Za, Hudayah, Hidayati, & Kalimantan, 2016). Therefore, good service quality will increase the trust toward an online website and build the brand awareness.

Online service quality is covering all dimensions of the purchase experience (Rolland & Freeman, 2010). Service quality is the crucial source of competitive advantage for the e-commerce because it is difficult to imitate and sustain repeat purchase from the customers. Jayawardhena (2004); Yen & Lu (2008) stated that online service quality contains a variety of activities. Activities such as the search for the product via the website search engine, the procedure of purchase, product delivery process, and the after-sale service. Such activities are not agreed anywhere on the actual contents of the sale. Online service quality can be defined by the role of the company like customer boundary, the type of services provided by online vendors, and issues of privacy and security (Piercy, 2013).

The studied of Wang & Zhang (2016) identified that e-service quality is a vital factor to lead to customer satisfaction and long-term development of an online service provider. As a matter of fact, service quality refers to a contrast of perceived service and expected service and use the gap between expectations and perceptions of customers received to evaluate the level of service quality (Parasuraman, Zeithaml, & Berry, 1985). In the e-commerce context, service quality is one of the crucial elements in determining the success or failure of the online website, which is how well the service deliver to match with customer expectation. Based on the research of Kassim and Abdullah (2008), the qualities of good e-service are ease of use, web design, responsiveness, personalization and assurance.

Based on the study of Rao (2013) identified that e-service quality is a critical driver of strategies advantage to online websites. Exceptional service quality provides a strategic advantage for companies to stand out from their competitors as it will be difficult to out-do their service quality ideals. Rao (2013) proposed a conceptual model of service quality. Based on the conceptual model, the customer perception of service quality toward an online website is good when the experienced quality meets their expected quality. Expected quality has some considerable factors like market communication, online website image, word-of-mouth and customer needs and wants. Meanwhile, experienced quality is the

image of the online website form in consumer mind regarding the quality of service delivered to them.

2.1.4 Word-of-Mouth Communication

The rise of Internet technology has allowed WOM theory to evolve from the concept of physical or face-to-face communication into electronic word of mouth that is enabled by the Internet (Hidayanto, Ovirza, Anggia, Budi, & Phusavat, 2017). Moreover, word-of-mouth information is a crucial source created by individuals or marketers and it is disseminated by consumers or marketers to other consumers. In this situation, information provided through word-of-mouth will help consumer to evaluate a product or service before consumption, and it will also shape expectations of that service or product (Hidayanto et al., 2017). In addition, word of mouth communications involves multidirectional exchanges of information in an asynchronous mode, and anyone who can use the Internet can generate and utilize eWOM.

The rapid development of e-commerce platforms has digitalized consumer WOM in the form of product reviews (Dellarocas & Narayan, 2006) and WOM has become a crucial source of product information to help consumers evaluate a product's overall excellence like popularity and quality. Thus, word-of-mouth has already attracted significant research efforts (Lin & Wang, 2018). Word-of-mouth is highly influential among individuals. Word-of-mouth has a positive effect on purchasing interest and decision making, evolved to eWOM stimulate the online website becoming widespread and it has the chance in reaching out to a wider consumer group (Yean Sien, & Falahat, 2015). The consumers will share reviews, ideas and comments about the product, brand or service on social network such as Facebook and Twitter. The eWOM communication has become a crucial source for many consumers to make purchase decision (Gümüş & Bal, 2016).

Consumer's decision to provide positive reviews by word-of-mouth about the product or services will decrease the uniqueness of possessions (Amar &

Andrew, 2009). Thus, positive word-of-mouth may hurt consumers who have high need for uniqueness. Therefore, consumers are not willing to spread positive word-of-mouth for publicly consumed products that they own (Gümüş & Bal, 2016). Berger and Schwartz (2011) also examined the psychological factors that drive immediate and ongoing WOM. However, Berger and Heath (2007) found that the unique and fascinating products get more immediate WOM but do not receive more sustaining WOM over time. In general, products which are prompted more by the setting or are more publicly visible compared to others will obtain more WOM both immediately and over time.

Lin and Heng (2015) explored that most of the consumers will observe the product's existing word-of-mouth before purchasing. In the e-commerce context, the influences of word-of-mouth typically signals product quality. Additionally, existing WOM often shapes consumers' expectation of the product's performance. Besides, the level of satisfaction may be reflected in the product's subsequent word-of-mouth in term of consumers' contribution to the WOM valence (i.e., review ratings) and the WOM volume (i.e., additional pieces of reviews). Expectation-confirmation theory serves well as the underlying theory to examine the impact of prior WOM on subsequent WOM in terms of both valence and volume.

2.1.5 Customer Satisfaction

Satisfaction is one of the significant consumers outcomes in e-commerce (Cheung & Lee, 2005). Explicitly, satisfaction is the only driver of consumers' purchase intention, but also the key to retain the long-term customers and loyal customers (Evanschitzky et al., 2016). According to the study of Hsu, Chang, Chen (2012), customer satisfaction is important to understand customers' purchase intention since customers' buying behaviour can normally be predicted by their purchase intention. During the first visit to a website, the online website's provider attempts to convert the visitor into a buyer. Similarly, purchase intention directly influences revenue and profitability of the online

website. Therefore, the customers satisfaction on their first visit will increase the purchase intention.

Oliver (1980) explained that consumer satisfaction is a level of expectation and expectancy disconfirmation. Satisfaction significantly influences consumers' buying behaviour and their intention to purchase the products in an online environment. Alam & Mohd.Yasin (2010) explored that disconfirmation is directly affect the customer satisfaction. However, the outcome of disconfirmation is sufficiently influenced by expectation and perceived performance. For those vendors that are selling their products or services via online, internet users are their main target customers for their products and services. Those online vendors can convert their potential customers into real ones retaining their purchasing power to a very large range on the services they offer and the satisfaction that customer expectations (Alam & Mohd. Yasin, 2010).

The studied of Purwanto & Kuswandi (2017) stated that the results of the post-consumption evaluation are that the customer either satisfied or dissatisfied. Satisfaction is the feeling of happy or disappointment that rises after comparing the perceived performance of a product against its expected performance (Purwanto & Kuswandi, 2017). The level of satisfaction is affected by the level of consumer value. Zeithaml (1988) explored that the perceived value the consumers received from service provider may satisfy or dissatisfy them. Based on the study of Purwanto & Kuswandi (2017) explained that, e-commerce in which perceived value has effect on satisfaction and is supported by the relationship between the provider and purchaser, makes customers experience an intimate relationship, leading e-commerce users in increasing happiness.

Based on the study of Koay & Derek (2016), the product or service should link with the buyers' expectation indicating customer satisfaction. Customer satisfaction is a significant precursor of future purchase intention and is to achieve the expected standard of quality. In reality, high level of customer satisfaction leads to a high level of purchasing intention (Fang, Chiu, & Wang, 2011). However, service provider should take into account customers'

satisfaction can also lead to brand switching behaviour or discontinuation of future purchase (K.Y.Koay & O.L.T.Derek, 2014).

2.1.6 Brand Recognition

According to Yoo (2014), there are a few investigates stated that keyword search ads is directly influence online customers brand recognition. Insight able to gain customer knowledge on how and why keyword search ads facilitate the advertisers' campaigns, especially for those unpopular brands or startup online stores. Brand recognitions are raises mainly via consumers' past experience with a brand and external information of a brand from reviews, friends or family (Regan and Fazio, 1977). When customer has no past experience with a brand that is expected and prefer, brand recognition is influenced by the ease and visibility of whatever information comes to customer mind during evaluation process.

Most of the online customers think that brand names found on the top of webpage are the famous brands in the e-commerce platforms. Therefore, online customers usually expect to see more popular brands first in search engine ranking (iProspect, 2006). Nevertheless, when those not popular brands are top ranked, online customers will doubt the brand recognition of the brands. The online customers will try to recall additional information from their memory to develop an understanding information.

The study of Thoma & Williams (2013) explained that the popular brand was preferred even when additional star ratings rendered it as less attractive. However, the additional information did affect the customers of chosen famous items, particularly in the cases when star ratings for the recognised brand were negative. Customers generally based on a strong link between brand recognition and consumer preferences to purchase a product. Besides, successful advertising significantly affected the number of times that recognized brands were chosen if the product is famous. Recognized products are sustainably preferred over unrecognised brands even if associated information about the

former is clearly negative in comparison. The strong effect of brand recognition can influence people's judgment. It will directly affect the decision making.

Study of Karjalainen (2007) stated that brand recognition can be viewed as a crucial element of application within design. Brand or product features reflect in various design features of product. Those variety categories of products and services, it is easy to title a number of brands that are not only known for the high quality products but also for their impressive design. Those brands use certain design uniqueness consistently with their product attribute. Visual recognition of brands and products has become a crucial feature within variety of product categories. Organizations have to create products or service that not only attractive design but also bring out the uniqueness of products to the brand in defined the core value. Brand recognition can be viewed as a crucial element in product design. Therefore, a good or attractive product design able to improve the brand recognition.

2.1.7 Security

Based on the study of Skitsko & Ignatova (2016), information security in online website is a problem among all the online store. There are some threats of information security. First treat is leakage of the store's data of customers. There are many hackers regarding electronic payments and making spiteful changes to the store's catalogue. Additionally, large online stores raise their reputation and therefore have to invest in more security technology and use the whole range of available countermeasures, while small stores may outsource the processes involved in online payment or opt out of accepting payment cards online in favor of receiving money from the buyer via a courier, who delivers the goods (Skitsko & Ignatova, 2016).

According to study of Kim & Han (2001) explained that customer privacy is becoming the most important security issue in e-commerce (Udo, 2001). None of the customers is willing to exploit a business to distribute sensitive customer data, like credit card information without customer empowerment or permission.

Encryption technologies are effectively used to preserve customers' privacy. Encryption and digital signatures support secure application in e-mail and online payment process. However, hacking the online payment system and spread the viruses are also very serious threats to e-commerce. Most probably hackers attack networks or e-commerce websites to render e-services unavailable. Website providers mainly use firewalls to protect their internal networks. Firewalls has become the central point of defence in the business security architecture.

Based on the study of Ruppel, Underwood-Queen & Harrington (2003) explored that the first consideration for website provider is security problem. There is only thing that can slow down the internet and the sales of e-commerce platform is consumers loss of confidence towards the preservation of customer privacy and the security systems. Organizations are minimizing risks by avoiding the web for direct sales and some organizations postpone transaction-based e-commerce until the security system is well-established (Baldwin & Currie, 2000; CIO Customer Publishing, 1999). It will restrain the concern about security and also the use of direct sales or transaction-based e-commerce (Ruppel, Underwood-Queen, & Harrington, 2003).

According to Qu (2009), many traditional commerce ways transfer to online business will carry some security problems such as issue of privacy and security of online customer, protection of customers' personal information and the security of online transaction. Although the large-scale e-commerce is prevailing in these few years, many companies have introduced consistent software and hardware products. Due to a series of e-commerce issues, the security problems involved diversification. However, the e-commerce transactions in e-commerce website and the most serious issues are about the security of transactions. there are many security risks during transaction process.

2.1.8 Consumer Trust

Consumer trust is an important element that has been frequently studied in the e-commerce literature. Trust is able to reduce the uncertainty and complexity of transactions and relationships in electronic markets. One of the reasons why consumers not purchasing from internet vendors, is lack of trust towards the online website (Petrovic et al.,2003). E-commerce as an online commercial activity, consist of more uncertainty and risk than real stores (Lee and Turban, 2001). Consumer trust is more critical in e-commerce because consumer cannot touch, feel and smell the real product. That trust plays a main role in the relationships between consumers and e-vendors. Consequences of consumer trust influences consumers' preference to use or continue to purchase in the e-commerce platform (Pavlou, 2003).

Based on the study of Hidayanto et al. (2017) explored that when customers want to participate in e-commerce activities, they have to overcome a high risk and uncertainty related to the unscrupulous behaviour of the other parties, which in this context refers to e-commerce providers. These negative perceptions may lead to potential customers to vacillate to engage in online transactions (Hajli, Wang, Tajvidi, & Hajli, 2017). In order to anticipate this, trust could be an effective social mechanism believed to reduce any complexity and weaknesses that potential customers feel in relation to e-commerce (Hidayanto et al., 2017). Trust will affect the decision-making process. Eventually, trust can increase an individual's willingness to be vulnerable to the risk of opportunistic behaviour on the part of another, reduce expectations of opportunistic behaviour, and more generally, reduce risk perceptions (Hajli, Lin, Featherman & Wang, 2014).

Accordingly, consumer trust is a multidimensional social concept which relevant important dimensions depending on the situation of the interaction and consist of both behavioural intentions and perceptive elements. The behavioural intentions aspects of trust deal with behaviour that raise customer susceptibility to vendor under conditions of interdependence (Lewis & Thornhill, 2009).

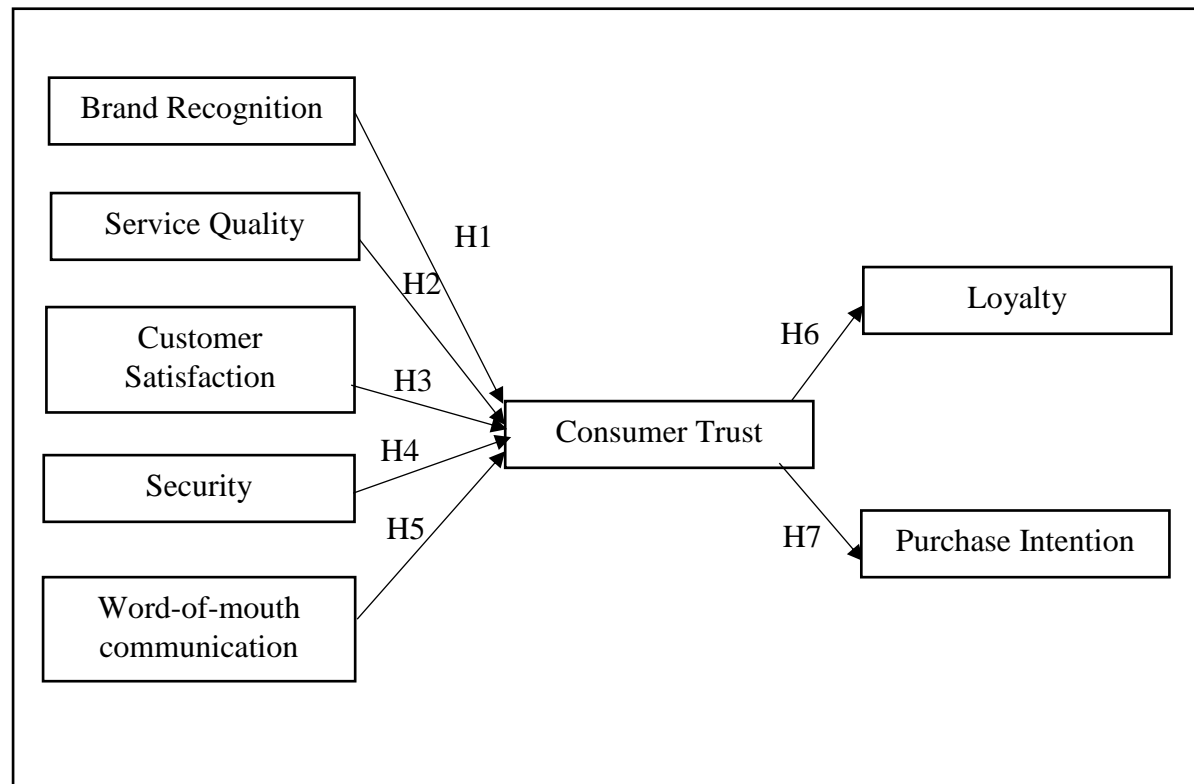
E-commerce is a new form of commercial activity in this generation, it is existence of more uncertainty and risk than traditional store (Lee & Turban, 2001). Therefore, trust is more serious in e-commerce. Trust plays a crucial role in the relationships between consumers and online vendors (Fung & Lee, 1999). Some of the customers' lack of willingness to provide information or shop online is because they are lacking of trust between most businesses in e-commerce platform. It is a vital issue that online websites have characteristics that provide confidence required for customers to know their personal information is being protected in its company.

2.2 Review of Relevant Theoretical Models

We have a total of eight variables in this research which are exogenous variables and endogenous variables. Those variables consist of brand recognition, service quality, customer satisfaction, security, word-of-mouth communication loyalty, purchase intention and consumer trust.

2.3 Conceptual Framework

Figure 2.1 Conceptual Framework



Adapted from: Lu, Zhao, & Wang, 2010; Oliveira, Alinho, Rita, & Dhillon, 2017; Prashant Palvia, 2009; Wang et al., 2016; Teo & Liu, 2007

2.4 Hypotheses Development

2.4.1 The Association between brand recognition and consumer trust

According to study of Yoo (2014), online users will search the brands that they recognize or famous when they are looking for a product. They are probably to search for ad rankings through online. Normally customer will purchase product with recognizable brand because they trust the brand. Therefore, brand recognition has significantly affected by consumer trust. This study has further

confirmed that consumers' decision making and knowledge will influence brand recognition and consumer trust (Yoo, 2014).

2.4.2 The Association between service quality and consumer trust

Luo & Lee (2011) defined that consumer trust is referring to the predictions persisted by the customer that the online service provider is dependable and can be counted in delivering his or her promises. From an e-service viewpoint, consumer trust can be explained as the concept that exists when confidence is built in one party in another party's service quality (Morgan & Hunt, 1994; Ranaweera & Prabhu, 2003). Consumer trust has been theorized as dimensions of the technology acceptance model (TAM) and it is considerable influencing the users' willingness to do transaction online and service expectations in term of useful information supplied to customers (Hoffman, Novak, & Peralta, 1999). In fact, consumer trust could be viewed as trust in the service itself from a service quality perspective (Parasuraman, 1988).

2.4.3 The Association between customer satisfaction and consumer trust

Customer satisfaction is interconnected to consumer trust (Delgado-BaHester and Mimuera-Aleman, 2001). In e-commerce, service provider of unable to meet consumer needs can led by the result of dissatisfaction of customers. (Dolinsky, 1994; Halstead et al. 1993). Consumer trust goes beyond consumer's satisfaction with the functional performance of the product and its attributes (Ha & Perks, 2005). Consumer trust has been explained and defined as the satisfaction based on the consumer reaction towards the brand and it is based on their view of the brand on the reliability and responsibility towards the welfare and interests of the consumers (Delgado-Ballester, 2001).

2.4.4 The Association between security and consumer trust

According to the study of Jiang, Jones & Javie (2010), consumer trust acts as the coordinator between the successful relationship of the buyer and the seller. Besides, consumer trust could also decrease the correlation between perceptions of risk and transactions (Morgan & Hunt, 1994) and purchase decision making will be positively affected (Schurr & Ozanne, 1985). Among the most significant dimension of the worries in consumer having to shop online are privacy and security issues. Majority of consumers that are making online purchases are very concerned about the lack of security in regard to personal information and usage of customer personal information by the company for sending unrequested information (Business Week, 2000). Moreover, consumers who are thinking of purchasing online but have yet to purchase anything at all through online are troubled about the problems relating to the privacy of customer information, such as fraud and collection of personal information, specifically regarding to the information of credit card (Business Week, 2000; Miyazaki & Fernandez, 2001).

2.4.5 The Association between word-of-mouth communication and consumer trust

Awad & Ragowsky (2008) stated that online WOM systems focus on the communication regarding information of the product and by sharing it to others. Additionally, the view of WOM systems quality is possibly based on what benefit can the WOM system provide to customers. Customers will likely identify the information of the specific product that comes with great benefit, and thus predicting the online retailer to be more ability, whereby it is the component of online trust. Therefore, customers expect that there will be a positive impact and effect through WOM quality on the trust of e-commerce platform. According to the literature, it has shown that offline WOM has varying consequences in decreasing the perception of risk (Garbarino & Strahilevitz, 2004). Hence, customers expect that in the online setting, it will affect WOM system on trust to get a better feedback.

2.4.6 The Association between consumer trust and purchase intention

Lee, Sun, Chen & Jhu (2015) defined consumer trust as a fundamental of e-commerce. In a business-to-consumer (B2C) relationship, consumer trust in the e-vendor is ultimately significant in evaluating risk (McCole, Ramsey and Williams, 2010). Trust has played a crucial role in e-commerce. Therefore, the influence of trust on consumer online transaction activities is essential in predicting e-commerce adoption (Pavlou, 2002). However, consumer decision to adopt in online purchase involves not only perceptions of technology but also trust about the seller. Trust is an essential concept for relationship marketing. Pavlou (2002) suggested that individuals with high consumer trust are possibly to be more favourable towards online shopping. Customers' trust in a virtual salesperson (such as website provider) will significantly affect their attitudes toward the online store and their purpose to shop online (Lee, Sun, Chen, & Jhu, 2015).

2.4.7 The Association between consumer trust and loyalty

Akbar & Parvez (2009) stated that trust is foundational in developing customer loyalty. The significance of trust in describing loyalty is also supported by authors such as Lim and Razzaque (1997). However, in a market with suitable alternatives lack of trust might lead to negative loyalty. Customer lack of trust towards a brand will also change to other brands, it will reduce the loyalty of the brand. Corbitt, Thanasankit, and Yi (2003) has showed that in a case of telecommunication sector there is a positive effect of trust on customer loyalty.

2.5 Conclusion

A cleared and relevant schematic diagram and hypotheses development is well defined in this chapter through viewing the previous finding done by other researches. Next, the research methodology will clearly discuss in Chapter 3.

CHAPTER 3: METHODOLOGY

3.0 Introduction

Research methodology is the techniques involved and used in order to collect data or information needed in conducting this research. Therefore, this chapter is inclusive of research design, data collection methods, sampling design, research instrument, construct measurement, data processing and data analysis to show the way of this research is being carried out.

3.1 Research Design

Research design is a principal plan that clearly stated the strategies and measures for gathering and examining the desired particulars to address the research problem (Zikmund, Babin, Carr & Griffin, 2009). It has provided with the framework or plan of action for researcher to avoid inappropriate information collected in solving the problem. Research design is separated into two parts which are qualitative research and quantitative research (Zikmund et al., 2009). As for this study, quantitative research was chosen as data were collected from distribution of questionnaires and involves large number of respondents to produce generalizable results. The data collected are through empirical assessment using numerical measurement and statistical analysis to address the research objectives (Zikmund et al., 2009).

Besides that, causal research is used in this study and causal research is also called as explanatory research. A causal research helps to discover the cause and effect of the relationship regarding the selected variables (Penwarden, 2014). This study objective is to investigate on the determinants which are brand recognition, service quality, customer satisfaction, security and word-of-mouth communication affecting the consumer's trust and from the consumer's trust, this study will be able to determine on how it affects loyalty and purchase intention.

3.2 Data Collection Methods

Data collection is an indispensable part in the research. It is a process or procedure for collecting data from various measures and sources to find out the answers for the problem of the research. In data collection, it consists of two types of data which is primary data and secondary data. In this research, both data are used and collected to conduct this research.

3.2.1 Primary Data

Primary data brings the meaning of first-hand experience or information is where data collected directly from. This first-hand experience does not have any previous records or information. This is the first time where researchers get the data from the respondents in order to run this study and for a specific research purpose.

The data collected for this research was through survey by distributing questionnaires where we collected and gathered feedbacks from 300 respondents that have purchased online recently and answered questions with the online vendor that they have recently purchased from. The data collected have not been altered or changed in any way as they are gained from first-hand.

This reflects on the authenticity and reliability of the data as the results collected are of the true opinions from the respondents. Due to the distribution was mainly done via online channels, the information obtained was relatively affordable. The questionnaire containing 38 questions has provided sufficient and detailed information for the reliability and accuracy of the test.

3.2.2 Secondary Data

Secondary data is derived and collected from secondary sources which are journals, articles, dictionaries and periodicals. The secondary data collected have been analysed and compiled by other parties for their research purposes. However, the secondary data got to be well-aware as it may decrease the accuracy of the data due to outdated information and fail to meet the requirement of the research. In this study, the information is obtained from journals in Google Scholar and Jstor, articles and websites.

3.3 Sampling Design

Sample is where a part of population was taken to examine in order to collect information for research purpose (Manage, 2003). Sampling is also the process of selecting some elements from a population to represent another population (Cooper and Schindler, 2006). Sampling is the process of selecting units (people, organization) from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen (Trochim, 2005). The estimation of population is dependent on the result of the sample. The sampling method chosen and adopted as it is easier and convenient for researches because it is hard to gather information from a large group of people. However, researchers must also ensure in selecting the right group of people to answer the questions in order to minimize the error and inaccurate results.

3.3.1 Target Population

Target population is a group of individuals whom researchers are aiming at for the research purposes and also in order to generalize findings from them. Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions (Hair, Bushand and Ortinau, 2006). The target of this study is any individuals of all ages who have

done purchasing online recently. They are to answer the questionnaire with a specific online vendor that they have purchased from recently in mind.

3.3.2 Sampling Frame and Sampling Location

Sampling frame brings the meaning of the list of all units in the population that can be sampled such as individuals, household or institution. Sampling frame is also a physical representation of the population from which a sample is drawn and is useful in supplying the listing of each element in a population (Sekaran & Bounjie, 2010).

The sampling frame of this study is mainly focusing on Malaysians who purchased products online recently. In order to boost the accuracy of the data, the questionnaires are distributed virtually to the relevant respondents across Malaysia rather than physically. The questionnaire is set up using Google Form and it was subsequently distributed to the relevant respondents. The virtual data collection method was chosen as it is the most effective and efficient way that enables the researches in reaching out to a large number of respondents. The data collected through Google Form has relatively increased the diversity and comprehensiveness of the sampling frame. This has enabled the researches to get a clearer view and picture on the determinants that have affected the consumer's trust in e-commerce or purchasing online in Malaysia. The distribution of the questionnaires is done solely in Malaysia only.

3.3.3 Sampling Elements

The sampling elements in this research are Malaysians of all ages who have purchased online recently. The group of respondents are chosen because a more accurate and detailed information can be obtained as they are able to deliver their experience and understanding while answering the questionnaire.

3.3.4 Sampling Technique

The sampling technique is divided into two categories which is probability and non-probability sampling. In probability sampling, an individual must establish some process or procedure to ensure the units in the population have the same probability or chance of being chosen. For the non-probability sampling method, the chosen units in population were unknown.

In this research, convenience sampling is chosen as the sampling technique. Convenience sampling is also called as opportunity sampling or accidental sampling (Alvi, 2016). Respondents are chosen based on their convenience and easy to approach. Usually, this sampling involving selecting respondents of whom are the easiest to obtain for our sample. The selection process is continued until it has achieved the targeted sample size which is at 300 respondents (Abyad, 2011). In this case, respondents that have agreed to answer the questionnaire are chosen as we tried asking people whom are not in a rush or hurry.

3.3.5 Sampling Size

A large quantity size of sampling is necessary because the larger the sample size, the lesser the error occurred (Saunders, Lewis and Thornhill, 2009). Sample size among 30 to 500 is recommended for most research. It cannot be set neither too large nor too small in the research. Researcher can benefit of the central limit theorem if sample size is greater than 30 (Roscoe, 1975). The sampling size for this study is fixed at 300 Malaysians who have purchased online recently. This research study is conducted via online survey. A total set of 300 questionnaire are distributed to respondents via online.

3.4 Research Instrument

Research instrument is a tool of measurement used to obtain required data. After rounds of discussion, researches have come to a conclusion and decided to use surveys and questionnaires as research instrument. Online questionnaires are selected to run the research as it would be easier for the researchers to clarify the questions and instructions for the respondents. The researches have also given guidance and assistance to the respondents at a time where they are confused with the questions or may not understand the questions well. It helped in reducing the ambiguity of the respondents.

3.4.1 Design of Questionnaire

The questionnaire is in the form of fixed-alternative questions. The questions given are limited alternative responses and respondents are required to choose the responses closest to their point of view. This type of questions requires lesser time consuming and less interviewer skill. Also, respondents are easier to answer as the options are given (Zikmund et al., 2009).

The questionnaire is prepared in English as it is the international language and it is suitable to communicate with the respondents. Before starting the survey, the respondents are briefed on the sole purpose of doing the survey which is described on the cover page. The respondents are also informed that their information will be kept private and confidential.

Generally, the questionnaire is divided into two major sections which are Section A (The Exogenous and Endogenous Variables) and Section B (Respondent's Demographic Profile). Section A is designed to collect information who have purchased online recently. The questions developed around the relationship between the exogenous and endogenous variables which are brand recognition, service quality, customer satisfaction, security, word-of-mouth communication, consumer trust, loyalty and purchase intention. There is a total of 30 questions in this section. The questions for each variable are ranged from 2 to 5 questions.

Section B is designed to collect the demographic data of the respondents. It consists of 8 questions which asked for basic respondent information which inclusive of gender, race, age, education level, monthly income in Ringgit Malaysia, how many years have the respondents purchased online, types of products purchased online and location.

The sources for the questions in the questionnaire are adapted from past journals and applied in this research. The questions selected are modified and rearranged it accordingly.

3.5 Construct Measurement (Scale and Operational Definitions)

3.5.1 Scale of Measurement

There is a total of four measurement scales that can be used to classify the data collected in a research, namely Nominal, Ordinal, Interval and Likert scale.

3.5.1.1 Nominal Scale

Nominal scale represents the most unrestricted assignment of numerals. The numerals are used only as labels or type numbers, and words or letters would possibly be used too (Zikmund et al., 2009). In a statistical view, nominal scale is the lowest measurement. There are different categories of answers provided for respondents to select from.

Figure 3.1: Example of Nominal Scale Question

31. Gender : Male Female

Source: Generated for research purpose

3.5.1.2 Ordinal Scale

Ordinal scale is used to classify data by ranking order (Zikmund, 2010). This scale is normally used to restructure the data collected in an order such that there is a ranking arrangement among the data. An ordinal scale is the next power of measurement.

Figure 3.2: Example of Ordinal Scale Question

33. Age : 18 – 24 years old
 25 – 29 years old
 30 – 34 years old
 35 - 39 years old
 40 – 44 years old
 45 – 49 years old
 50 years old and above

Source: Generated for research purpose

3.5.1.3 Interval Scale

This measurement can be defined as likert scale and it is a standard survey rating scale. Commonly the researcher will use a range of rating scale to get the responds from the respondents. For example: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree.

Figure 3.3: Sample of Interval Scale Question

A. Purchase intention		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	Given the chance, I would consider purchasing product(s) on this vendor's website in the future.	1	2	3	4	5

Source: Developed for the research

3.5.2 Origins of Construct

Table 3.1: The Origin of Constructs

A. Purchase intention		Reference
1	Given the chance, I would consider purchasing product(s) on this vendor's website in the future.	Yaobin Lu, Ling Zhao, Bin Wang (2010). From Virtual Community Members to C2C E-commerce buyers: Trust in Virtual Communities and its Effect on Consumers' Purchase Intention.
2	It is likely that I will purchase product(s) on this vendor's website in the near future.	
3	Given the opportunity, I intend to purchase product(s) on this vendor's website.	

B. Loyalty		Reference
4	I encourage friends and others to do business with this online vendor that I have in mind.	Beril Durmus, Yesim Ulusu, Sakir Erdem. (2013). Which dimensions affect private shopping e-customer loyalty?
5	I will recommend this vendor's website to someone who seek for my advice.	
6	I will say positive thing about this vendor's website to other people.	
7	I will consider this vendor's website to be my first choice for future purchase /transactions.	
8	I will purchase more from this vendor's website in the coming months.	

C. Service Quality		Reference
9	The time I spend to shop at this online vendor's site that I have in mind is highly reasonable.	Tiago Oliveira, Matilde Alinho, Paulo Rita, Gurpreet Dhillon (2017). Modelling and testing consumer trust dimensions in e-commerce. Journal of Computers In Human Behavior.
10	The effort involved in shopping at this online vendor's site that I have in mind is worthwhile.	
11	The shopping experience at this online vendor's site that I have in mind is excellent.	
12	I found significant value by shopping at this online vendor's site that I have in mind.	

D. Customer Satisfaction		Reference
13	Overall, I am satisfied with the current online vendor that I have in mind.	Tiago Oliveira, Matilde Alinho, Paulo Rita, Gurpreet Dhillon (2017). Modelling and testing consumer trust dimensions in e-commerce. Journal of Computers In Human Behavior.
14	I am very pleased with making purchases from my current online vendor.	
15	I did the right thing when I decided to use this online vendor that I have in mind.	

E. Brand Recognition		Reference
16	In my opinion, my current online vendor has a good image in the minds of consumers.	Tiago Oliveira, Matilde Alinho, Paulo Rita, Gurpreet Dhillon (2017). Modelling and testing consumer trust

17	In general, I believe that my current online vendor always fulfils the promises that it makes to its customers.	dimensions in e-commerce. Journal of Computers In Human Behavior.
18	I would encourage friends and relatives to do business with my current online vendor.	

F. Word-of-mouth		Reference
19	I tell my friend about this online vendor that I have in mind.	Palvia, P. (2009) "The role of trust in e-commerce relational exchange: A unified model." Information & Management. 46, 213-220
20	I want my friend to buy from this online vendor that I have in mind.	

G. Consumer Trust		Reference
21	I believe this vendor's website is trustworthy.	Thompson S.H.Teo, Jing Liu (2005). Consumer Trust in e-commerce in the United States, Singapore and China.
22	I believe this vendor's website provides reliable information.	
23	I believe this vendor's website keeps promises and commitments.	
24	I believe this vendor's behaviour keeps my best interests in mind.	
25	I believe this vendor's behaviour meets my expectations.	

H. Security		Reference
26	I feel secure giving out credit card information at this website	Xiaoying Guo, Kwek Choon Ling & Mei Liu (2012). Evaluating Factors Influencing Consumer Satisfaction towards Online Shopping in China.
27	The vendor's website has adequate security features	
28	I feel I can trust this website	
29	I feel safe in my transactions with this website	
30	I believe the website provides accurate information to potential customers like me	

3.6 Data Processing

3.6.1 Data Checking

Data checking is also known as questionnaire checking. It is the first step of data processing to make sure all the questionnaires are completely filled by respondents whereby none of the questions have missed by the respondents. Researchers have to always make sure that the data collected is complete.

3.6.2 Data Editing

Data editing is a process of investigating the data collected in questionnaires to detect errors and increase precision of data (MBA Knowledge Base). Data editing involves process of checking and correcting the omissions, legibility, and consistency of data collected from respondents (Zikmund et al., 2009). This is to warrant the data collected are consistent. Researchers then collect the data collected if there is any data error occurred such as incomplete and ambiguous

answers from the respondents. If the researchers received two answers for a single question, the researchers will then have to choose one of the answers only.

3.7 Data Analysis

The significance of data analysis is to highlight the information that will help the researchers in determining the facts and figures to solve the research problem. Moreover, once the researchers have completed the data processing, the researchers have decided to use the Partial Least Square (PLS) path modeling in order to generate the data that has collected. PLS path modeling is defined as the most developed, user friendly and general system (Henseler, Hubona, & Ray, 2016). In short, PLS path modeling is a data analysis methodology for statistics that exist as the Regression Models, Structural Equation Models and Multiple Table Analysis methods (Sanchez, 2013).

3.7.1 Descriptive Analysis

Descriptive analysis is a simple way for raw data transformation to describe the basic features such as using measures of central tendency, variability and distribution (Zikmund et al., 2009). They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data. By execution of data analysis, researchers have better understanding about the information, able to diminish the accumulated data to a manageable size, construct summary and apply the statistical techniques (Zikmund, Babin, Carr, & Griffin, 2012).

Table 3.2: Sample of Result for Demographic Question

	N	%	Pie Chart
Gender			
Female			
Male			

Source: Developed for the research

Furthermore, the summary descriptive analysis for Section A is as follow:

Table 3.3: Sample of Central Tendencies Measurement of Constructs

Variables	N = Number of respondents	Mean	Standard Deviation
Customer Satisfaction			
Brand Recognition			
Word-of-mouth Communication			
Consumer Trust			
Security			
Purchase Intention			
Loyalty			
Service Quality			

Source: Developed for the research

3.7.2 Scale Measurement

3.7.2.1 Reliability Test

Cronbach Alpha is a survey instrument to determine the underlying construct that the researcher wants to measure and also to ensure reliability and consistency in the results of data collection (Santos, 1999). Cronbach Alpha is a popular and commonly used method in testing the reliability of the variables. The following table shows the Rules of Thumb of Reliability Test

Table 3.4: Rules of Thumb of Reliability Test

Alpha Coefficient Range	Strength of Association
< 0.6	Poor
0.6 – 0.7	Moderate
0.7 – 0.8	Good
0.8 – 0.9	Very Good
> 0.9	Excellent

*If Alpha > 0.95, item should be inspected to ensure they measure different aspects of the concept.

Source: Developed for the research

3.7.2.2 Validity Test

Validity is a scale of measurement which test the accuracy or degree to which the score of items truthfully signifies the concept (Zikmund et al., 2009). There are three basic types in order to judge the validity of a measure which are face validity, content validity and criterion validity. The researchers have used

Average Variance Extracted (AVE) in order to test the validity of the variables. Average Variance Extracted (AVE) is used to measure the variance level that is captured by a construct comparing to the level due to measurement error. For values above 0.7, the values are considered as very good. However, the level 0.5 is still acceptable.

3.7.2.3 Discriminant Validity Test

Discriminant validity is the degree of measuring of different traits are unrelated. Discriminant validity is established when an indicator's loading on construct is higher than all of its cross-loadings with other constructs (Hair et al., 2016). In discriminant validity, we are looking into three main tests, which are Cross-loadings, Fornell and Larcker Criterion and Heterotrait-Monotrait ratio (HTMT). Fornell and Larcker criterion and cross-loadings are highly recommended to use in PLS.

Through accessing cross-loading, the loading indicator of the factor have to be higher than all other constructs with a condition that the factor loading's cut off value is higher than 0.70 (Ab Hamid, M, Sami, & Mohmad Sidek, M, 2017).

The second criterion is by using Fornell-Lacker criterion in order to determine discriminant validity. Fornell-Lacker criterion is a method in comparing the square root of the average variance extracted (AVE) together with the correlation of latent constructs. A latent construct brings the meaning of having to explain the indicator of the variance rather than the other latent constructs variance. Therefore, the square root of the AVE of each construct should have a higher value than the correlation with other latent constructs (Henseler, Ringle, & Sarstedt, 2014).

The third measure for discriminant validity is Heterotrait-monotrait (HTMT) ratio correlation. The performance of this method is able to achieve higher specificity and sensitivity rates from 97% to 99% comparing to cross-loadings which is at 0.00% and Fornell-Lacker at 20.82% (Henseler et al., 2014). A

predefined threshold will be compared if HTMT is used as a criterion. If the HTMT value is higher than this threshold, it can be concluded that there is a lack of discriminant validity (Ab Hamid, M et al., 2017).

3.7.3 Inferential Analysis

3.7.3.1 Bootstrapping

Bootstrapping is used in order to determine the significance of the relationship between variables. Bootstrapping is used for inference testing. Bootstrap is used and applied in order to gain inference statistics for all model parameters. It rests on the assumption that the sample distribution will actually convey information about the population distribution. An estimate standard error is inferred from the standard deviation of the bootstrap estimates. In order to generalize from a sample to a population, the coefficients have to be evaluated for significance. The inference statistics is inclusive of the empirical bootstrap confidence intervals and also one-sided or two-sided p-values (Henseler et al., 2016).

3.8 Conclusion

In this chapter, the research methodology used by the research to conduct the research was explained. The Partial Least Square (PLS) path modeling was used to generate and record the data after the questionnaires were received from the respondents.

CHAPTER 4: RESEARCH RESULTS

4.0 Introduction

The result was attained through the data collection method from 300 respondents in this chapter. The data obtained from questionnaires were computed and figured by using the Partial Least Square (PLS) software. Tables and figures will be showed to present the results in an understandable and readable method. This chapter discuss about the descriptive analysis of the respondent personal profile and inferential analysis with the Multiple Linear Regression Analysis and Multivariate Regression Analysis.

4.1 Descriptive Analysis

In this section, respondents' demographic information was analysed using frequency analysis. It is inclusive of gender, age, highest education level, races, and monthly salary. Below are the results of the frequency analysis.

4.1.1 Personal Characteristic of Respondents

According to Figure 4.1, there are total 300 respondents which are 165 female respondents and 135 male respondents. The female respondents are slightly more than male respondents whereby female consists of 55% and male consists of 45%.

Figure 4.1 showed the race group of respondents in the analysis. The result showed that 13.3% of respondents are Malay which consist of 40 respondents, 73% of respondents are Chinese which takes up 219 respondents and 10% of respondents are Indian which consists of 30 respondents. Whereas, there are 3.7% of respondents coming from other races which consist of 11 respondents.

For the age group, we have separated into 4 ranges. The result showed that the largest group of respondents is between 18-24 years old which contributes 34.7% consisting of 104 respondents. Besides, there are 21.7% of respondents between 25-29 years old which is consisting of 65 respondents, 14.7% of respondents between 30-34 years old which is consisting of 44 respondents, 12.3% of respondents between 35-39 years old which is consisting of 37 respondents, 6% of respondents between 40-44 years old which is consisting of 18 respondents. The smallest group of respondents is between 45-49 years old which contributes 3.7% consisting of 11 respondents.

In the education level, there have 4 levels of qualification which are secondary school, college diploma, bachelor degree and postgraduate degree. The result showed that there are 9.3% of respondents are secondary school which consists of 28 respondents, 14.3% of respondents are college diploma which consists of 43 respondents, 64.3% of respondents are bachelor degree which consists of 193 respondents and 12% of respondents are postgraduate degree which consists of 36 respondents.

Based on the result below, 3% of respondents' salary are below RM1,000 which consists of 3 respondents, 28.3% of respondents' salary are between RM1,500 – RM3,000 which consists of 85 respondents, 13.3% of respondents' salary are between RM3,001 – RM4,000 which consists of 40 respondents, 16.7% of respondents' salary are between RM4,001 – RM5,500 which consists of 50 respondents, 14.7% of respondents' salary are between RM5,501 – RM8,500 which consists of 44 respondents, 12% of respondents' salary are between RM8,501 – RM15,000 which consists of 36 respondents. Whereas only 3% of respondents have no income which consists of 9 respondents and 1.3% of respondents are students which consists of 4 respondents.

According to the table below, the result showed that most of the respondents have 5 years online purchase experience taking up 15.7% of respondents consist of 47 respondents. There are 11% of respondents have 1 year online purchase experience which consist of 33 respondents, 27% of respondents have 2 years online purchase experience which consist of 81 respondents, 25% of

respondents have 3 years online purchase experience which consist of 75 respondents, 14.3% of respondents have 4 years online purchase experience which consist of 43 respondents, 1% of respondents have 6 years online purchase experience which consist of 3 respondents, 0.7% of respondents have 7 years online purchase experience which consist of 2 respondents and 1% of respondents have 10 years online purchase experience which consist of 3 respondents.

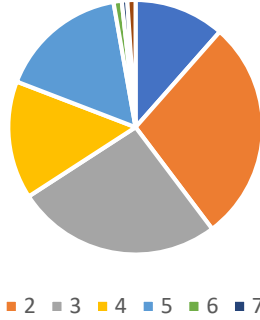

The table below showed that most of the respondents purchased clothing and footwear through online which are 36.7% of respondents and consist of 110 respondents. There are 13% of respondents purchased cosmetics and jewellery through online which consist of 39 respondents, 12.3% of respondents purchased computers and accessories through online which consist of 37 respondents, 7.7% of respondents purchased books through online which consist of 23 respondents, 10.7% of respondents purchased household appliances and audio equipment through online which consist of 32 respondents, 14% of respondents purchased digital products through online which consist of 42 respondents and 0.3% of respondents purchased bags through online which consist of only 1 respondent.

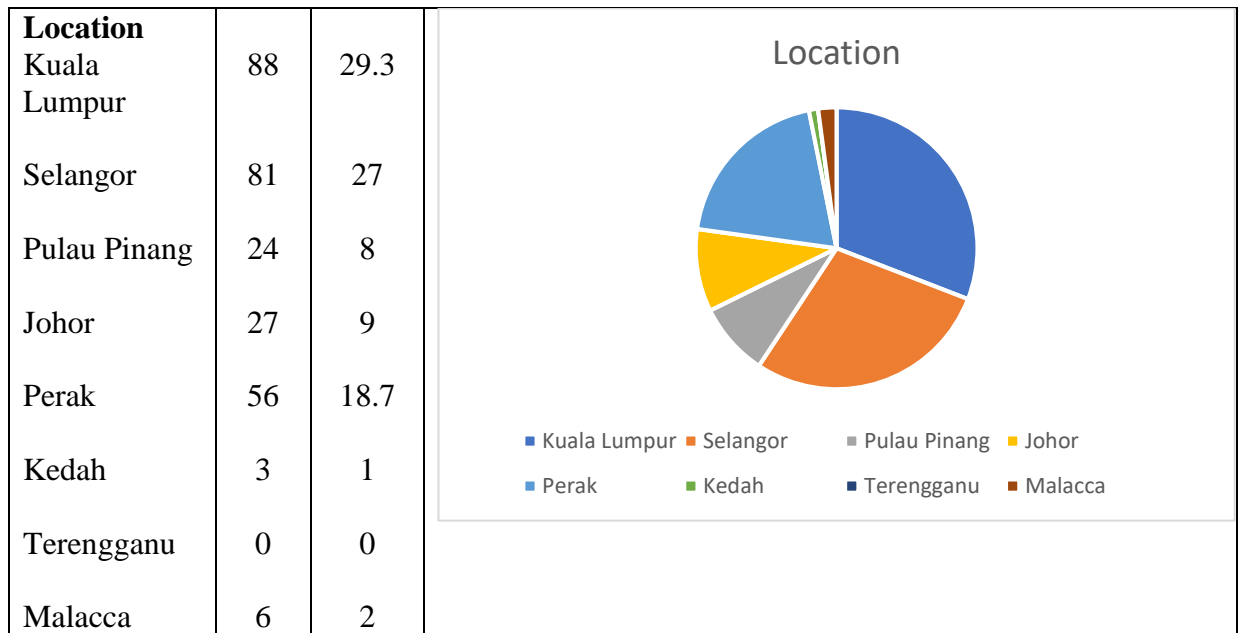
Figure 4.1 showed the locations of respondents in the survey. The majority of respondents are from Kuala Lumpur which have contributed 29.3% (88 respondents). There are 27% of respondents from Selangor which consist of 81 respondents, 8% of respondents from Pulau Pinang which consist of 24 respondents, 9% of respondents from Johor which consist of 27 respondents, 18.7% of respondents from Perak which consist of 56 respondents, 1% of respondents from Kedah which consist of 3 respondents and 2% of respondents from Malacca which consist of 6 respondents.

Figure 4.1 Personal Characteristic of Respondents

	N	%	
Gender			<p style="text-align: center;">Gender</p> <p style="text-align: center;">■ Female ■ Male</p>
Female	165	55	
Male	135	45	
Race			<p style="text-align: center;">Race</p> <p style="text-align: center;">■ Malay ■ Chinese ■ Indian ■ Others</p>
Malay	40	13.3	
Chinese	219	73	
Indian	30	10	
Others	11	3.7	
Age			<p style="text-align: center;">Age</p> <p style="text-align: center;">■ 18-24 ■ 25-29 ■ 30-34 ■ 35-39 ■ 40-49 ■ 45-49</p>
18-24	104	34.7	
25-29	65	21.7	
30-34	44	14.7	
35-39	37	12.3	
40-44	18	6	
45-49	11	3.7	

Education Level			
Secondary School	28	9.3	<p style="text-align: center;">Education Level</p> <p style="text-align: center;"> ■ Secondary School ■ College Diploma ■ Bachelor Degree ■ Postgraduate Degree </p>
College Diploma	43	14.3	
Bachelor Degree	193	64.3	
Postgraduate Degree	36	12	
Monthly Income (RM)			
RM1000	3	1	<p style="text-align: center;">Monthly Income</p> <p style="text-align: center;"> ■ RM1,000 ■ RM1,500 - RM3,000 ■ RM3,001 - RM4,000 ■ RM4,001 - RM5,500 ■ RM5,501 - RM8,500 ■ RM8,501 - RM15,000 ■ No Income ■ Student </p>
RM 1,500 – RM 3,000	85	28.3	
RM 3,001 – RM 4,000	40	13.3	
RM 4,001 – RM5,500	50	16.7	
RM 5,501 – RM8,500	44	14.7	
RM 8,501 – RM15,000	36	12	
No income	9	3	
Student	4	1.3	

<p>How many years have you purchased online</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>10</p>	<p>33</p> <p>81</p> <p>75</p> <p>43</p> <p>47</p> <p>3</p> <p>2</p> <p>3</p>	<p>11</p> <p>27</p> <p>25</p> <p>14.3</p> <p>15.7</p> <p>1</p> <p>0.7</p> <p>1</p>	<p>How many years have you purchased online?</p>  <p>■ 1 ■ 2 ■ 3 ■ 4 ■ 5 ■ 6 ■ 7 ■ 10</p>
<p>Types of products purchased online</p> <p>Clothing and Footwear</p> <p>Cosmetics and Jewellery</p> <p>Computers and Accessories</p> <p>Books</p> <p>Household Appliances and Audio Equipment</p> <p>Personal Digital Products</p> <p>Bags</p>	<p>110</p> <p>39</p> <p>37</p> <p>23</p> <p>32</p> <p>42</p> <p>1</p>	<p>36.7</p> <p>13</p> <p>12.3</p> <p>7.7</p> <p>10.7</p> <p>14</p> <p>0.3</p>	<p>Types of Products purchased online</p>  <p>■ Clothing and Footwear ■ Cosmetics and Jewellery ■ Computers and Accessories ■ Books ■ Household Appliances and Audio Equipment ■ Personal Digital Products ■ Bags</p>



Source: Develop for the research

4.1.2 Central Tendencies Measurement of Constructs

Variable 1 = Purchase Intention

Figure 4.2 : The mean and standard deviation of each constructs for the purchase intention variable

Statistics

	Questions	Mean	Std. Deviation
1.	Given the chance, I would consider purchasing product(s) on this vendor’s website in the future.	3.96	0.733
2.	It is likely that I will purchase product(s) on this vendor’s website in the near future.	4.00	0.828
3.	Given the opportunity, I intend to purchase product(s) on this vendor’s website.	4.02	0.756

Source: Develop for the research

Variable 2 = Loyalty

Figure 4.3 : The mean and standard deviation of each constructs for the loyalty variable

Statistics

	Questions	Mean	Std. Deviation
4.	I encourage friends and others to do business with this online vendor that I have in mind.	3.92	0.824
5.	I will recommend this vendor's website to someone who seek for my advice.	4.01	0.743
6.	I will say positive things about this vendor's website to other people.	3.96	0.798
7.	I will consider this vendor's website to be my first choice for future purchase /transactions.	3.87	0.836
8.	I will purchase more from this vendor's website in the coming months.	3.69	0.903

Source: Develop for the research

Variable 3 = Service Quality

Figure 4.4 : The mean and standard deviation of each constructs for the service quality variable

Statistics

	Questions	Mean	Std. Deviation
9.	The time I spend to shop at this vendor's website is highly reasonable.	3.92	0.832
10.	The effort involved in shopping at this vendor's website is worthwhile.	3.94	0.784
11.	The shopping experience at this vendor's website is excellent.	3.95	0.818
12.	I found significant value by shopping at this vendor's website.	3.92	0.793

Source: Develop for the research

Variable 4 = Customer Satisfaction

Figure 4.5 : The mean and standard deviation of each constructs for the customer satisfaction variable

Statistics

	Questions	Mean	Std. Deviation
13.	Overall, I am satisfied with the current online vendor that I have in mind.	3.98	0.720
14.	I am very pleased with making purchases from my current online vendor.	4.03	0.740
15.	I did the right thing when I decided to use this online vendor that I have in mind.	3.94	9.809

Source: Develop for the research

Variable 5 = Brand Recognition

Figure 4.6: The mean and standard deviation of each constructs for the brand recognition variable

Statistics

	Questions	Mean	Std. Deviation
16.	In my opinion, my current online vendor has a good image in the minds of consumers.	4.03	0.775
17.	In general, I believe that my current online vendor always fulfils the promises that it makes to its customers.	3.99	0.793
18.	I would encourage friends and relatives to do business with my current online vendor.	3.95	0.763

Source: Develop for the research

Variable 6 = Word-of-mouth communication

Figure 4.7: The mean and standard deviation of each constructs for the word-of-mouth communication variable

Statistics

	Questions	Mean	Std. Deviation
19.	I tell my friend about this online vendor that I have in mind.	3.94	0.832
20.	I want my friend to buy from this online vendor that I have in mind.	3.81	0.919

Source: Develop for the research

Variable 7 = Consumer Trust

Figure 4.8: The mean and standard deviation of each constructs for the consumer trust variable

Statistics

	Questions	Mean	Std. Deviation
21.	I believe this vendor's website is trustworthy.	3.99	0.782
22.	I believe this vendor's website provides reliable information.	4.01	0.799
23.	I believe this vendor's website keeps promises and commitments.	3.97	0.817
24.	I believe this vendor's behaviour keeps my best interests in mind.	3.93	0.788
25.	I believe this vendor's behaviour meets my expectations.	3.95	0.793

Source: Develop for the research

Variable 8 = Security

Figure 4.9: The mean and standard deviation of each constructs for the security variable

Statistics

	Questions	Mean	Std. Deviation
26.	I feel secure giving out credit card information at this online vendor's website.	3.78	0.923
27.	This vendor's website has adequate security features.	3.80	0.951
28.	I feel I can trust this vendor's website.	3.88	0.853
29.	I feel safe in my transactions with this vendor's website.	3.84	0.913
30.	I believe this vendor's website provides accurate information to potential customers like me.	3.87	0.835

Source: Develop for the research

Table 4.1: Central Tendency Measurement of Constructs

	N = Number of respondents	Mean	Standard Deviation
Customer Satisfaction	300	3.9800	0.64942
Brand Recognition	300	3.9878	0.63894
Word-of-mouth Communication	300	3.8733	0.77089
Consumer Trust	300	3.9693	0.66110
Security	300	3.8327	0.78472
Purchase Intention	300	3.9944	0.66636
Loyalty	300	3.8900	0.61707
Service Quality	300	3.9308	0.65843

Source: Develop for the research

4.2 Scale Measurement

4.2.1 Reliability

Table 4.2: Outer Loadings, Construct Reliability and Validity

	Item	Outer Loadings	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Brand Recognition	BR1	0.836	0.760	0.862	0.675
	BR2	0.833			
	BR3	0.797			
Consumer Trust	CT1	0.818	0.887	0.917	0.690
	CT2	0.815			
	CT3	0.846			
	CT4	0.825			
	CT5	0.846			
Customer Satisfaction	CS1	0.872	0.821	0.893	0.737
	CS2	0.829			
	CS3	0.873			
Loyalty	L1	0.724	0.807	0.866	0.564
	L2	0.728			
	L3	0.776			
	L4	0.757			
	L5	0.769			
Purchase Intention	PI1	0.845	0.829	0.898	0.746
	PI2	0.855			
	PI3	0.890			
Security	S1	0.872	0.924	0.943	0.767
	S2	0.877			
	S3	0.891			
	S4	0.891			
	S5	0.848			
Service Quality	SQ1	0.777	0.833	0.889	0.666
	SQ2	0.814			
	SQ3	0.848			
	SQ4	0.826			
Word-of-mouth Communication	WOM1	0.894	0.709	0.873	0.774
	WOM2	0.865			

Source: Develop for the research

Outer loadings are the relationship for reflective constructs. The size of the outer loading is also commonly called indicator reliability. High outer loadings on a

construct indicate the associated indicators have much in common, which is captured by the construct. The size of the outer loading is also commonly called indicator reliability. The standard outer loading should be 0.7 or higher.

Based on the table above, BR is stated for brand recognition. The value of BR1 is 0.836 (> 0.70) therefore it is acceptable in research. The value of BR2 is 0.833 (> 0.70) which is acceptable in research. The value of BR3 is 0.797 (> 0.70) which is acceptable in research.

CS is stated for customer satisfaction. The value of CS1 is 0.872 (> 0.70) which is acceptable in research. The value of CS2 is 0.829 (> 0.70) which is acceptable in research. The value of CS3 is 0.873 (> 0.70) which is acceptable in research.

CT is stated for consumer trust. The value of CT1 is 0.818 (> 0.70) therefore is acceptable in research. The value of CT2 is 0.815 (> 0.70) which is acceptable in research. The value of CT3 is 0.846 (> 0.70) which is acceptable in research. The value of CT4 is 0.825 (> 0.70) which is acceptable in research. The value of CT5 is 0.846 (> 0.70) which is acceptable in research.

L is stated for loyalty. The value of L1 is 0.724 (> 0.70) which is acceptable in research. The value of L2 is 0.728 (> 0.70) which is acceptable in research. The value of L3 is 0.776 (> 0.70) which is acceptable in research. The value of L4 is 0.757 (> 0.70) which is acceptable in research. The value of L5 is 0.769 (> 0.70) which is acceptable in research.

PI1 is stated for purchase intention. The value of PI1 is 0.845 (> 0.70) which is acceptable in research. The value of PI2 is 0.855 (> 0.70) which is acceptable in research. The value of PI3 is 0.890 (> 0.70) which is acceptable in research.

S is stated for security. The value of S1 is 0.872 (> 0.70) which is acceptable in research. The value of S2 is 0.877 (> 0.70) which is acceptable in research. The value of S3 is 0.891 (> 0.70) which is acceptable in research. The value of S4 is 0.891 (> 0.70) which is acceptable in research. The value of S5 is 0.848 (> 0.70) which is acceptable in research.

SQ is stated for service quality. The value of SQ1 is 0.777 (> 0.70) which is acceptable in research. The value of SQ2 is 0.814 (> 0.70) which is acceptable in research. The value of SQ3 is 0.848 (> 0.70) which is acceptable in research. The value of SQ4 is 0.826 (> 0.70) which is acceptable in research.

WOM is stated for word-of-mouth. The value of WOM1 is 0.894 (> 0.70) which is acceptable in research. The value of WOM2 is 0.865 (> 0.70) which is acceptable in research.

As a result, the overall outer loadings value is above 0.70 which means that variables are improving the validity and reliability of the test.

Cronbach's Alpha is a measure of internal consistency which is closely related to a set of items are as a group. A reliability coefficient of 0.70 or higher is considered "acceptable" in research.

Based on the table above are consisting of eight variables which are brand recognition, customer trust, customer satisfaction, loyalty, purchase intention, security, service quality, word-of-mouth communication, consumer trust, loyalty and purchase intention. Security has the highest consistency and reliability with Cronbach's Alpha value of 0.924. Whereas word-of-mouth communication has the lowest consistency and reliability with Cronbach's Alpha value of 0.709. The Cronbach's Alpha value of brand recognition is 0.760 (> 0.7), therefore it is acceptable in the research. The Cronbach's Alpha value of Consumer trust is 0.887 (> 0.70), therefore it is acceptable in the research. The Cronbach's Alpha value of customer satisfaction is 0.821 (> 0.70), therefore it is acceptable in the research. The Cronbach's Alpha value of loyalty is 0.807 (> 0.70), therefore it is acceptable in the research. The Cronbach's Alpha value of purchase intention is 0.760 (> 0.70), therefore it is acceptable in the research. The Cronbach's Alpha value of service quality and word-of-mouth communication is 0.833 (> 0.70) and 0.709 (> 0.70) respectively therefore they are acceptable in the research.

As a result, the overall Cronbach's Alpha value is above 0.70 which means that variables in the test are highly correlated.

4.2.2 Validity

Average Variance Extracted (AVE) is a measurement of the amount of variance that captured by a construct in relation to the amount of variance due to measurement error. A validity coefficient of 0.50 or higher is considered "acceptable" in research.

The result showed that word-of-mouth communication is the highest average variance extracted among all the variables which is 0.774 (>0.50). Whereas, loyalty is the lowest average variance extracted among all the variables which is 0.564 (> 0.50). The average Variance Extracted value of consumer trust is 0.690 (> 0.50) therefore is acceptable in the research. The average Variance Extracted value of brand recognition is 0.675 (> 0.50), therefore it is acceptable in the research. The average Variance Extracted value of customer satisfaction is 0.737 (> 0.50), therefore it is acceptable in the research. Meanwhile, the average Variance Extracted value of is purchase intention is 0.746 (> 0.50), therefore it is acceptable in the research. The average Variance Extracted value of security is 0.767 (> 0.50), therefore it is acceptable in the research. The average Variance Extracted value of service quality is 0.666 (> 0.50), therefore it is acceptable in the research.

As a result, the overall average variance extracted value is above 0.50 which means that variables in the test are highly correlated.

4.2.3 Discriminant Validity

Discriminant validity is to tests whether concepts or measurements that are not supposed to be related are actually unrelated. Discriminant validity is established when an indicator's loading on construct is higher than all of its cross-loadings with other constructs (Hair et al., 2016). In discriminant validity,

we are looking for three main tests, which are Cross Loadings, Fornell-Larcker Criterion and Heterotrait-Monotrait ratio (HTMT).

Cross Loadings is the first approach to assess the discriminant validity of the indicator. The value of outer loading on the associated construct should be higher than any cross-loading on the other constructs. Table 4.4 showed that each item has the higher value in their constructs and has lower values under other constructs. The results identified that the items of each constructs are different with other constructs.

Fornell-Larcker criterion is a construct that shares more variance with its items or indicators. The indicator loadings of the constructs is only slightly different which brings the meaning of the Fornell-Larcker criterion performs poorly. Whereas, the indicator loadings vary more which brings the meaning of the Fornell-Larcker criterion's performance has improved the discriminant validity issue but it is still poor overall (Voorhees, Brady, Calantone & Ramirez, 2016). Table 4.3 showed that the Fornell-Larcker criterion's results showed that all of the constructs achieve satisfactory results where each of the constructs has a higher AVE with its associated construct and a lower value when comes to other constructs.

If the performance of Fornell-Larcker criterion's is not satisfactory when the outer loadings of a constructs is not within the range between 0.600 and 0.800 or even the outer loadings are much stronger. Therefore, we will look into heterotrait-monotrait ratio (HTMT) to solve the issue. HTMT is the ratio between trait correlations to the within-trait correlations. The HTMT approach is an estimate of what the true correlation between two constructs would be, if they were perfectly measured (Hair et al., 2016). The HTMT value is 0.900 or above which mean the constructs are lack of discriminant validity. The HTMT value should be lower than 0.900. Table 4.5 showed that overall values is below 0.900 except for customer satisfaction. The value of customer satisfaction is 0.922 (> 0.900) which means lack of discriminant validity.

As a result, from all the tests mentioned above, we can conclude that all of the constructs are distinct from each other.

Table 4.3: Fornell-Larcker Criterion

	Brand Recognition	Consumer Trust	Customer Satisfaction	Loyalty	Purchase Intention	Security	Service Quality	WOM Communication
Brand Recognition	0.822							
Consumer Trust	0.741	0.830						
Customer satisfaction	0.727	0.705	0.858					
Loyalty	0.601	0.667	0.633	0.751				
Purchase Intention	0.483	0.582	0.562	0.704	0.864			
Security	0.605	0.698	0.613	0.582	0.534	0.876		
Service Quality	0.625	0.694	0.714	0.656	0.549	0.592	0.816	
WOM Communication	0.590	0.642	0.590	0.647	0.544	0.600	0.615	0.880

Source: Develop for the research

Table 4.4: Cross Loadings

	Brand recognition	Consumer trust	Customer satisfaction	Loyalty	Purchase Intention	Security	Service Quality	WOM communication
BR1	0.836	0.583	0.593	0.453	0.433	0.526	0.506	0.454
BR2	0.833	0.657	0.606	0.469	0.347	0.484	0.501	0.457

BR3	0.797	0.581	0.593	0.565	0.417	0.483	0.537	0.549
CS1	0.625	0.631	0.872	0.551	0.505	0.522	0.607	0.459
CS2	0.642	0.560	0.829	0.499	0.480	0.525	0.612	0.495
CS3	0.609	0.621	0.873	0.577	0.461	0.533	0.622	0.567
CT1	0.575	0.818	0.571	0.547	0.527	0.624	0.571	0.546
CT2	0.619	0.815	0.546	0.519	0.486	0.570	0.589	0.566
CT3	0.640	0.846	0.598	0.529	0.416	0.563	0.508	0.490
CT4	0.576	0.825	0.545	0.541	0.471	0.567	0.576	0.481
CT5	0.663	0.846	0.661	0.625	0.512	0.571	0.631	0.574
L1	0.428	0.441	0.449	0.724	0.457	0.333	0.418	0.457
L2	0.438	0.441	0.440	0.728	0.576	0.358	0.457	0.439
L3	0.469	0.557	0.471	0.776	0.536	0.478	0.530	0.484
L4	0.471	0.526	0.503	0.757	0.598	0.512	0.517	0.526
L5	0.450	0.521	0.509	0.769	0.477	0.479	0.526	0.517
PI1	0.457	0.514	0.449	0.597	0.890	0.468	0.453	0.434
PI2	0.363	0.501	0.521	0.598	0.845	0.450	0.495	0.506
PI3	0.430	0.493	0.486	0.630	0.855	0.467	0.473	0.472
S1	0.435	0.520	0.469	0.454	0.445	0.872	0.447	0.471
S2	0.467	0.576	0.518	0.499	0.477	0.877	0.495	0.512
S3	0.574	0.624	0.541	0.492	0.454	0.891	0.514	0.541
S4	0.538	0.636	0.555	0.534	0.465	0.891	0.539	0.556
S5	0.605	0.674	0.585	0.556	0.493	0.848	0.576	0.538
SQ1	0.502	0.545	0.534	0.552	0.396	0.468	0.777	0.542
SQ2	0.511	0.540	0.571	0.528	0.481	0.452	0.814	0.463

SQ3	0.513	0.640	0.623	0.538	0.471	0.503	0.848	0.459
SQ4	0.518	0.532	0.600	0.525	0.441	0.508	0.826	0.555
WO M1	0.527	0.594	0.540	0.565	0.515	0.528	0.536	0.894
WO M2	0.512	0.532	0.497	0.575	0.439	0.530	0.547	0.865

Source: Develop for the research

Table 4.5: Heterotrait-Monotrait Ratio (HTMT)

	Brand recognition	Consumer trust	Customer Satisfaction	Loyalty	Purchase Intention	Security	Service Quality	WOM communication
Brand recognition								
Consumer trust	0.898							
Customer satisfaction	0.922	0.823						
Loyalty	0.769	0.780	0.774					
Purchase Intention	0.611	0.677	0.681	0.861				
Security	0.715	0.764	0.700	0.661	0.609			
Service quality	0.788	0.801	0.863	0.795	0.660	0.669		
WOM communication	0.807	0.805	0.773	0.854	0.708	0.739	0.805	

Source: Develop for the research

4.3 Inferential Analyses

4.3.1 Significance Test

Table 4.6: Summary Results of Hypothesis H1- H7

	Significance Interpretation	T value	P-value	Significant
H1	There is a significant relationship between brand recognition and consumer trust.	5.723	0.000	Significant
H2	There is a significant relationship between service quality and consumer trust.	4.026	0.000	Significant
H3	There is a significant relationship between customer satisfaction and consumer trust.	1.704	0.091	Not Significant
H4	There is a significant relationship between security and consumer trust.	4.605	0.000	Significant
H5	There is a significant relationship between word-of-mouth communication and consumer trust.	2.299	0.022	Significant
H6	There is a significant relationship between consumer trust and brand loyalty.	18.691	0.000	Significant
H7	There is a significant relationship between consumer trust and purchase intention.	13.057	0.000	Significant

Source: Develop for the research

H1: There is a significant relationship between brand recognition and consumer trust.

Based on table 4.7, the results of the test were $t=5.802$, $p\text{-value} (0.000) < 0.05$.

There is significant association between brand recognition and consumer trust.

H2: There is a significant relationship between service quality and consumer trust.

Based on table 4.7, the results of the test were $t= 3.978$, $p\text{-value} (0.000) < 0.05$. There is a significant association between service quality and consumer trust.

H3: There is a significant relationship between customer satisfaction and consumer trust.

Based on table 4.7, the results of the test were $t= 1.689$, $p\text{-value} (0.091) > 0.05$. There is no significant association between customer satisfaction and consumer trust.

H4: There is a significant relationship between security and consumer trust.

Based on table 4.7, the results of the test were $t= 4.536$, $p\text{-value} (0.000) < 0.05$. There is a significant association between security and consumer trust.

H5: There is a significant relationship between word-of-mouth communication and consumer trust.

Based on table 4.7, the results of the test were $t= 2.284$, $p\text{-value} (0.022) < 0.05$. There is a significant association between word-of-mouth communication and consumer trust.

H6: There is a significant relationship between consumer trust and loyalty.

Based on table 4.7, the results of the test were $t= 18.793$, $p\text{-value} (0.000) < 0.05$. There is a significant association between consumer trust and loyalty.

H7: There is a significant relationship between consumer trust and purchase intention.

Based on table 4.7, the results of the test were $t= 12.799$, $p\text{-value} (0.000) < 0.05$. There is a significant association between consumer trust and purchase intention.

4.3.2 Assessment of Structural Model

Table 4.7: R-squared

	R Square (R²)
Consumer trust	0.700
Loyalty	0.445
Purchase Intention	0.339

Source: Develop for the research

R square (R²) is to explain the predictive power of the model which mean how the model can be explained by the latent variables. According to Hair et al. (2016), R² value is range from 0 to 1, and the higher the value referring that the higher predictive accuracy of the model. A rule of thumb for R² proposed by Hair et al. (2016) is 0.25 (weak), 0.50 (moderate) and 0.75 (satisfactory).

Table 4.7 showed that there are three R² in this research which are consumer trust, loyalty and purchase intention. For the consumer trust, the value of R² is 0.700 which is moderate. For the loyalty, the value of R² is 0.445 which is weak. For the purchase intention, the value of R² is 0.339 which is consider weak.

4.4 Conclusion

Chapter four included the explanation on using the descriptive analysis and inferential analysis to evaluate the data collected. Results of the analysis with supporting reasons for the results are further discussed in chapter five.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATION

5.0 Introduction

In chapter 5, it creates a conclusion for chapter 4 and the research project. This chapter is inclusive of the summary of descriptive and inferential analysis. Additionally, the discussion of major findings major and implications the research will be mentioned in this chapter. It also discusses on the limitations of the study and recommendations for future research.

5.1 Summary of Statistical Analysis

5.1.1 Descriptive Analysis

The objective of this research is to investigate determinant of consumer trust in e-commerce. The personal characteristic of respondents are described by using the demographic factors such as gender, race, age, education level, monthly income, location, purchase experience and type of products purchased online.

In this research, we have total 300 respondents which are 165 females and 135 males. The majority of respondents are females which consist of 55% and 45% of respondents are males.

Based on the statistic of race group, majority of respondents are Chinese which consist of 219 (73%) respondents. Whereas, the minority of respondents are from other races which consist of 11(3.7%) respondents.

For the age group, the result showed that the largest age group of respondents is between 18 to 24 years old which consist of 104 respondents (34.7%). This age group belong to generation Y. While the smallest age group is 45 to 49 years

old which consist of 11 respondents (3.7%). This age group belong to generation X.

For the education level, the result showed that most of the respondents' education level is bachelor of degree which consist of 193 respondents (64.3%). That mean most of the respondents might be university student. Whereas, the least of respondents' education level is secondary school. This group of respondents mostly is secondary student.

In term of month income, 28.3% of the respondents' salary was RM1,500 – RM3,000 which consist of 85 respondents. Majority of respondents' salary in this range. Whereas, the minority of respondents is no income which consist of 9 respondents. This group might be student or retirement people.

For the purchase experience, most of the respondents has 3 years online purchase experience which consist of 75 respondents (25%). Whereas, minority of respondents has 7 years online purchase experience.

Most of the respondents is come from Kuala Lumpur which consist of 88 respondents (29.3%). Whereas, only 2% of respondents are come from Malacca which means only 6 out of 300 respondents.

Table 5.1: Central Tendency Measurement of Constructs

Variables	N = Number of respondents	Mean	Standard Deviation
Customer Satisfaction	300	3.9800	0.64942
Brand Recognition	300	3.9878	0.63894
Word-of-mouth Communication	300	3.8733	0.77089
Consumer Trust	300	3.9693	0.66110
Security	300	3.8327	0.78472

Purchase Intention	300	3.9944	0.66636
Loyalty	300	3.8900	0.61707
Service Quality	300	3.9308	0.65843

Source: Develop for the research

The mean or average that is used to derive the central tendency of the data in question. It is determined by adding all the data points in a population and then dividing the total by the number of points. A standard deviation allows us to know the degrees of dispersion amongst a set of data from a variable mean. The spread of variable data points from the mean are also determined by the points given out by the standard deviation.

5.1.2 Scale of Measurement

5.1.2.1 Reliability Test

Table 5.2: Reliability Statistics using 300 respondents

No	Variables/Constructs	Cronbach's Alpha	Rank
1	Brand Recognition	0.760	8
2	Consumer Trust	0.887	3
3	Customer Satisfaction	0.821	6
4	Loyalty	0.807	7
5	Purchase Intention	0.829	5
6	Security	0.924	1
7	Service Quality	0.889	2
8	Word-of-mouth Communication	0.873	4

Based on the reliability test that was done using all data from the 300 respondents, we have concluded that the Cronbach's Alpha value or the alpha coefficient of the security variable are the highest with a value reading of 0.924 followed by service quality with 0.889, consumer trust with 0.887, word-of-mouth communication with 0.873, purchase intention with 0.829, customer satisfaction with 0.821, loyalty with 0.807 and brand recognition with 0.760. As all the values are above the 0.7 mark, this means that all of the variables or constructs have a strong internal consistency.

5.1.2.2 Validity Test

Table 5.3: Validity Statistics using 300 respondents

No	Variables/Constructs	Average Variance Extracted (AVE)	Rank
1	Brand Recognition	0.675	6
2	Consumer Trust	0.690	5
3	Customer Satisfaction	0.737	4
4	Loyalty	0.564	8
5	Purchase Intention	0.746	3
6	Security	0.767	2
7	Service Quality	0.666	7
8	Word-of-mouth Communication	0.774	1

Based on the validity test that was done using all data from the 300 respondents, we have concluded that the average variance extracted of the security variable are the highest with a value reading of 0.924 followed by service quality with 0.889, consumer trust with 0.887, word-of-mouth communication with 0.873, purchase intention with 0.829, customer satisfaction with 0.821, loyalty with 0.807 and brand recognition with 0.760. As all the values are above the 0.7 mark,

this means that all of the variables or constructs have a strong internal consistency.

5.1.3 Inferential Analysis

5.1.3.1 Assessment of Structural Model

Table 5.4: R-squared

	R Square (R^2)
Consumer trust	0.700
Loyalty	0.445
Purchase Intention	0.339

Source: Develop for the research

R square (R^2) is to explain the predictive power of the model which mean how the model can be explained by the latent variables. According to Hair et al. (2016), R^2 value is ranges from 0 to 1, and the higher the value referring that the higher predictive accuracy of the model. A rule of thumb for R^2 proposed by Hair et al. (2016) is 0.25 (weak), 0.50 (moderate) and 0.75 (satisfactory).

Table 4.7 showed that there are three R^2 in this research which are consumer trust, loyalty and purchase intention. For the consumer trust, the value of R^2 is 0.700 which is moderate. For the loyalty, the value of R^2 is 0.445 which is weak. For the purchase intention, the value of R^2 is 0.339 which is consider weak.

5.2 Discussion of Major Findings

Table 5.5: Major Findings of hypotheses

	Significance Interpretation	P-value	Significant
H1	There is a significant relationship between brand recognition and consumer trust.	0.000	Significant
H2	There is a significant relationship between service quality and consumer trust.	0.000	Significant
H3	There is a significant relationship between customer satisfaction and consumer trust.	0.091	Not Significant
H4	There is a significant relationship between security and consumer trust.	0.000	Significant
H5	There is a significant relationship between word-of-mouth communication and consumer trust.	0.022	Significant
H6	There is a significant relationship between consumer trust and brand loyalty.	0.000	Significant
H7	There is a significant relationship between consumer trust and purchase intention.	0.000	Significant

Source: Develop for the research

5.2.1 Brand Recognition

Based on the research analysis and results, we know that brand recognition shows a significant relationship with consumer trust. The significant relationship between both variables indicated by p-value of 0.000 which less than 0.05. Thus, the H₀ is rejected.

5.2.2 Service Quality

Based on the research analysis and results, we know that service quality shows a significant relationship with consumer trust. The significant relationship between both variables indicated by p-value of 0.000 which less than 0.05.

5.2.3 Customer Satisfaction

Based on the research analysis and results, we know that service quality shows a significant relationship with consumer trust. The no significant relationship between both variables indicated by p-value of 0.091 which more than 0.05.

5.2.4 Security

Based on the research analysis and results, we know that security shows a significant relationship with consumer trust. The significant relationship between both variables indicated by p-value of 0.000 which less than 0.05.

5.2.5 Word-of-mouth communication

Based on the research analysis and results, we know that word-of-mouth communication shows a significant relationship with consumer trust. The significant relationship between both variables indicated by p-value of 0.022 which less than 0.05.

5.2.6 Brand Loyalty

Based on the research analysis and results, we know that brand loyalty shows a significant relationship with consumer trust. The significant relationship between both variables indicated by p-value of 0.000 which less than 0.05.

5.2.7 Purchase Intention

Based on the research analysis and results, we know that purchase intention shows a significant relationship with consumer trust. The significant relationship between both variables indicated by p-value of 0.000 which less than 0.05.

5.3 Implications of Study

5.3.1 Managerial Implications

This research would be very useful for all who are thinking of venturing into e-commerce platform and starting a business. It is utmost significant for business or enterprise owners in understanding the needs of the consumers in this era. As every consumer expectation is different, therefore in order to understand it, a thorough research needs to be done and this study and research will be a benefit to them.

In this study, the variables that are being tested out are what researchers find important to know about consumers. First of all, a lot of consumers are worried about security that they will face in terms of online transaction payment. Once the consumers feel secure about it, it will lead to trust and eventually it will lead to loyalty and purchase intention in terms of purchasing products online. This study shows and analyses the personal characteristics of the consumers that affect the consumer trust in e-commerce. Every individual has different perception and opinion. Through this study, it enables the online vendors or e-commerce business owners in understanding the consumers demand and to satisfy their needs. Strategies need to be set right too in order to attract more consumers in purchasing online.

Through this study, the online vendors or e-commerce business owners will be able to gain a deeper understanding on the importance and the impact given by the determinants that are affecting the consumer trust on e-commerce. Determinants such as brand recognition, service quality, customer satisfaction, security and word-of-mouth communication are being tested out and the consumers have shown their concerns and thoughts through the survey we have done in order to collect data. As trust is important among the consumers, therefore it is important to know the worries of the consumers in order to expand business online too. When trust is instilled in consumers, it will then lead to loyalty and purchase intention. The consumers will keep buying from the same

vendor as the trust has been moulded and build in the consumers' mind. This study will be able to help the online vendors or business owners in overcoming the major challenges and eliminating the obstacles in the e-commerce platform.

Furthermore, it will also be able to provide broad information to the government. This will be able to help the government to evaluate on the growth and importance of e-commerce which has been contributing to the economy of the country.

5.4 Limitations of the Study

There are several limitations of this study whereby it is inclusive of time and resources constraints. The time frame given for this research is six months which is a short period of time. In this time frame, researchers were able to collect data from 300 respondents. As the target population is Malaysian of all ages who have purchased online recently, the number of respondents who have participated in this research is merely a small fraction of the whole Malaysia population. Moreover, the data was obtained through online survey as the researchers are consisting of full-time students and are not able to travel to other states in order to gather a more accurate information through other methods such as face-to-face interview due to resources constraint. As such, the result that has been gathered in this study gives rise to inaccurate results due to the sample size used, which arises from the time and resources and constraints.

Furthermore, it was discovered that there are less research and studies conducted on the Partial Least Square (PLS) path modelling done as the researchers used this data software in order to generate an accurate data. As such, in order to understand more about PLS and gathering information about it proved to be tough.

The limitations are acknowledged but they do not detract from the significance of findings but merely provide platforms for future research.

5.5 Recommendation for Future Research

To begin with, future researches are highly recommended to extend the time frame of the research to longer periods of time. This would allow the researchers more time to gain the opinions of the respondents through various methods such as survey, face-to-face interview and etc. Furthermore, by extending the time frame, researchers will also be able to collect data from a larger pool of respondents, which will provide better and accurate results. The researchers can also use the extended time frame to plan and gather resources to gain further information and knowledge.

Future researchers should also take into account in gaining a deeper understanding on the Partial Least Square path modelling if researchers have decided to use this software in generating data. This would be able to cut down the time spend in understanding the software while the research is being run and done.

5.6 Conclusion

The purpose of this research is to investigate on the determinants that affect consumer trust in e-commerce. The outcome of this research has proved that brand recognition, service quality, security, word-of-mouth communication has affected the consumer trust in e-commerce and the relationship between consumer trust and brand loyalty and purchase intention have been proven significant.

In a nutshell, the summary of statistical analysis, major findings, implication of the study, limitation of research and recommendations for future study have been layout and discussed in detail. This study has helped in providing a deeper understanding on the consumers' thought and concerns in purchasing online and the determinants that have been motivating them in having to keep purchasing online. This research has also made contributions to the e-commerce platform and the government.

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APPENDICES

Appendix A: Survey Questionnaire

Determinants of Consumer Trust in E-commerce Survey Questionnaire.

Dear respondent,

Survey on the Consumer Trust in E-commerce

We are degree students from University Tunku Abdul Rahman (UTAR) pursuing Bachelor of International Business (HONS), we are currently conducting a research project on the topic of “Determinants of Consumer Trust in E-commerce.”

This questionnaire takes approximately fifteen (15) minutes to complete. All responses obtained will be analyzed and are solely for academic purpose. **All** information, answers and identity of respondent will be kept strictly **PRIVATE AND CONFIDENTIAL**.

Thank you for your time and participation in this survey.

Respondent Instructions

Please attempt to answer all the questions if you have purchased any item online within the last year. Choose **ONE** particular **online vendor** that you interacted within the last year. Keep in mind this **ONE** particular vendor as you answer the entire questionnaire. To ensure confidentiality, you will not be asked to name this vendor.

QUESTIONNAIRE

Section I:

The following items involve aspects of the Consumer Trust, loyalty and purchase intention in E-commerce between you as a consumer and a given online vendor (of your choice). Please check the number that best captures your perspective.

5-Point Scale: **1** = Strongly Disagree **2** = Disagree **3** = Neutral **4** = Agree
5 = Strongly Agree

A. Purchase intention		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	Given the chance, I would consider purchasing product(s) on this vendor's website in the future.	1	2	3	4	5
2	It is likely that I will purchase product(s) on this vendor's website in the near future.	1	2	3	4	5
3	Given the opportunity, I intend to purchase product(s) on this vendor's website.	1	2	3	4	5
B. Loyalty		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
4	I encourage friends and others to do business with this online vendor that I have in mind.	1	2	3	4	5
5	I will recommend this vendor's website to someone who seek for my advice.	1	2	3	4	5
6	I will say positive things about this vendor's website to other people.	1	2	3	4	5
7	I will consider this vendor's website to be my first choice for future purchase /transactions.	1	2	3	4	5
8	I will purchase more from this vendor's website in the coming months.	1	2	3	4	5
C. Service Quality		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
9	The time I spend to shop at this vendor's website is highly reasonable.	1	2	3	4	5

10	The effort involved in shopping at this vendor's website is worthwhile.	1	2	3	4	5
11	The shopping experience at this vendor's website is excellent.	1	2	3	4	5
12	I found significant value by shopping at this vendor's website.	1	2	3	4	5
D. Customer Satisfaction		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
13	Overall, I am satisfied with the current online vendor that I have in mind.	1	2	3	4	5
14	I am very pleased with making purchases from my current online vendor.	1	2	3	4	5
15	I did the right thing when I decided to use this online vendor that I have in mind.	1	2	3	4	5
E. Brand Recognition		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
16	In my opinion, my current online vendor has a good image in the minds of consumers.	1	2	3	4	5
17	In general, I believe that my current online vendor always fulfils the promises that it makes to its customers.	1	2	3	4	5
18	I would encourage friends and relatives to do business with my current online vendor.	1	2	3	4	5
F. Word-of-mouth		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

19	I tell my friend about this online vendor that I have in mind.	1	2	3	4	5
20	I want my friend to buy from this online vendor that I have in mind.	1	2	3	4	5
G. Consumer Trust		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
21	I believe this vendor's website is trustworthy.	1	2	3	4	5
22	I believe this vendor's website provides reliable information.	1	2	3	4	5
23	I believe this vendor's website keeps promises and commitments.	1	2	3	4	5
24	I believe this vendor's behaviour keeps my best interests in mind.	1	2	3	4	5
25	I believe this vendor's behaviour meets my expectations.	1	2	3	4	5
H. Security		1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
26	I feel secure giving out credit card information at this online vendor's website.	1	2	3	4	5
27	This vendor's website has adequate security features.	1	2	3	4	5
28	I feel I can trust this vendor's website.	1	2	3	4	5
29	I feel safe in my transactions with this vendor's website.	1	2	3	4	5
30	I believe this vendor's website provides accurate information to potential customers like me.	1	2	3	4	5

Section II: General Information

31. Gender : Male Female
32. Race : Malay
 Chinese
 Indian
 Others
33. Age : 18 – 24 years old
 25 – 29 years old
 30 – 34 years old
 35 - 39 years old
 40 – 44 years old
 45 – 49 years old
 50 years old and above
34. Education Level : Secondary School
 College Diploma
 Bachelor Degree
 Postgraduate Degree
35. Monthly Income (RM) : RM 1,500 – RM 3,000
 RM 3,001 – RM 4,000
 RM 4,001 – RM5,500
 RM 5,501 – RM8,500
 RM 8,501 – RM15,000
 Others

36. How many years have you purchased online : 1
 2
 3
 4
 5
 Others: _____
37. Types of products purchased online : Clothing and Footwear
 Cosmetics and Jewellery
 Computers and Accessories
 Books
 Household Appliances and Audio Equipment
 Personal Digital Products
 If others, please state: _____
38. Location: : Kuala Lumpur
 Selangor
 Pulau Pinang
 Johor
 Perak
 Kedah
 Terengganu
 Malacca
 Kelantan
 Pahang
 Perlis
 Negeri Sembilan

Appendix B: Acceptance Letter for the 1st International Conference of World Academy of Islamic Management



ACCEPTANCE LETTER

Dear **Dr. Mohammad Falahat , Foo Yi Cheng & Chia Chee En**
Faculty of Accountancy and Management
Universiti Tunku Abdul Rahman (UTAR)

9th April 2018

Paper ID No: 137/2018

Congratulation! The technical committee is delighted to inform that your paper titled “**A Model for Consumer trust in E-Commerce**” has been accepted for oral presentation at the 1st International Conference of World Academy of Islamic Management (WAIM) 2018 in Bestari Hall of Universiti Kuala Lumpur (UniKL), Kuala Lumpur.

Your paper has been reviewed and it was found relevant to the theme of WAIM’s conference 2018. The Scientific Committee will evaluate your paper to be published in the International Journal of Economics and Management (Scopus Index).

Please note that the deadline for registration, payment and full paper submission is on 10th April, 2018. Should you require further clarification or assistance, please do not hesitate to contact the secretariat.

Once again, we would like to thank you for submitting your paper to WAIM and indeed we look forward to meeting you on 12-13 May 2018 in Kuala Lumpur.

Best regards,
The President of WAIM and Conference Chairman
Professor Emeritus Mohamed Sulaiman.
World Academy of Islamic Management Conference 2018.

12-13 MAY 2018
Saturday & Sunday

Venue:
Bestari Hall
Universiti Kuala Lumpur
Jalan Sultan Ismail
50250 Kuala Lumpur
Malaysia