# WEBSITE QUALITY SOCIAL ACTIVITIES AND ONLINE PURCHASE INTENTION IN MALAYSIA

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# Website Quality Social Activities and Online Purchase Intention in Malaysia

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#### ABSTRACT

The number of online shoppers in Malaysia has increased dramatically as compared to few years ago when e-commerce just started. Furthermore, it has significant impact on the number of online shopping platforms as well. Merchants have also been working hard and constantly improving their online shopping platform to maintain business. They will improve in many aspects, such as e-commerce qualities and social commerce factors. In this study, the researcher will examine on whether the e-commerce qualities (system quality, service quality, and information quality) and social commerce factors (performance expectancy, social influence, and habit) have significant effect on online purchase intention among millennial and iGen in Malaysia. In detail, the target population of 300 had been targeted and SPSS is being used to analyse the data collected. From the findings, system developers are able to selectively improve the platforms without wasting time and money to improve on the aspects that affect the purchase intention of online shoppers.

# **CHAPTER 1**

### **RESEARCH OVERVIEW**

This chapter will briefly introduce the background, problem statements, objectives, questions, significance study, term definitions and chapter layouts of this study. At the end of this chapter, there was a brief illustrated of e-commerce qualities (system quality, service quality, and information quality), and how social commerce factors (performance expectancy, social influence, and habit) affect the online purchase intention among the millennial and iGen in Malaysia.

### **1.1 INTRODUCTION**

In the early 1990s, the term "e-commerce" meant electronic execution of commercial transactions with the help of leading technologies such as Electronic Data Interchange (EDI) and Electronic Funds Transfer (EFT) (Weeks, 2018). This allows users to exchange business information and conduct electronic transactions more efficiently. In fact, without the assist of technology, the operation of traditional commercial market or the brick and mortar will become very rudimentary; a company will produce goods or services at upstream and then sell it to downstream consumers. There were no complicated procedures in the process, and the market that can be covered at that time is also very limited.

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In traditional commercial market or the brick and mortar, the transactions, sales and services were always subject to geographical restriction, even there were stores in physical locations for commercial transactions (Gupta, Bindal, Agarwal, & Khandelwal, 2018). There were also other restrictions, including office hours, marketing campaigns, require face-to-face communication during the sales and purchase process, and heavily rely on the word of mouth and recommendations of local customers. In addition, the sales and purchases were only repeated within the same local business area.

<b>Basis for Comparison</b>	Traditional Commerce	E-commerce
Definition	A branch of business which	Carrying out commercial
	focuses on the exchange of	transactions or exchange
	products and services, and	of information,
	includes all those activities	electronically on the
	which encourages exchange, in	Internet.
	some way or the other.	
Transaction Processing	Manual	Automatic
Accessibility	Limited Time	24×7×365
Physical Inspection	Goods can be inspected	Goods cannot be inspected
	physically before purchase.	physically before
		purchase.
Customer Interaction	Face-to-face	Screen-to-face
Business Scope	Limited	Worldwide
Information Exchange	No uniform platform	Uniform platform
Resource Focus	Supply side	Demand side
Business Relationship	Linear	End-to-end
Marketing	One-way marketing	One-to-one marketing
Payment	Cash, cheque, credit card, etc.	Fund transfer, etc.
Delivery of goods	Instantly	Takes time

**Table 1.1:** Comparison chart between traditional commerce and e-commerce. Adopted from Surbhi, S. (2016). Difference between traditional commerce and e-commerce.

 Retrieved 31 May, 2018, from Key Differences: https://keydifferences.com/difference-between-traditional-commerce-and-e-commerce.html

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Advances in Internet technology (IT) and the emergence of Web 2.0 and Web 3.0 online applications and solutions have changed the way people do business (Andriole, 2010). The types of commerce transaction include business-to-business (B2B), business-to-consumer (B2C), consumer-to-consumer (C2C) and consumer-to-business (C2B). At the same time, e-commerce has also contributed to the growth of online business, and other aspects include marketing, advertising, sales, product offering, billing and payment.

The following table below illustrates the types of commerce transaction:

Type of E-commerce	Definitions and Examples	<b>Circular Flow</b>
Business-to-Business	Business between companies	Manufacturer
(B2B)	and focuses on delivering	↑
	products from one business to	Website
	another. For example,	
	ExxonMobil and Chevron	Wholesaler
	Corporation.	¥
		Retailer
Business-to-Consumer	The company sells its	Company
(B2C)	products, goods or services	
	directly to consumers online.	Website
	For example, Amazon.	
		Customer
Consumer-to-	Consumer uses Internet or	Consumer-2
Consumer (C2C)	web technology to sell	↑
	products, goods or services to	Website
	other consumers. For	
	example, a platform similar	Consumer-1
	to eBay.	

Consumer-to-Business	Consumer or end user	Business
(C2B)	provides products or services	↑
	to organizations. For	(Website)
	example, Google AdSense.	<b>1</b>
		Consumer

**Table 1.2:** Type of e-commerce business classification. Adopted from Das, D. (2018).What is e-commerce and types of e-commerce with diagram. Retrieved 1 June, 2018, fromCSETutor: https://www.csetutor.com/what-is-e-commerce-types-of-e-commerce/

Then came the emergence of social commerce. Social commerce (s-commerce) is a new stream and subset of e-commerce that enables consumers to generate content on their social media accounts (Hajli, 2014). S-commerce enables sellers to enter different markets by integrating consumer social interactions (Hargadon & Bechky, 2006). Such businesses leverage user ratings, recommendations, online communities and social advertising to facilitate online shopping. Moreover, Koss (2018) has proposed several technologies that can be more effective in building business online, with the aim of receiving better feedback and results, (1) creating a brand community on Instagram, (2) using the right influencers for branding, (3) discover new products on Pinterest, and (4) create powerful ads with customer content.



**Figure 1.1:** Classification of social commerce. Adopted from Saundage, D., & Lee, C. Y. (2011). Social commerce activities–a taxonomy. Academy of Contemporary Islamic Studies.

S-commerce has great potential to replace existing e-commerce channels (Saundage & Lee, 2011). And, this channel has become a close concern for online merchants and service providers. In addition, social commerce has the ability to combine e-commerce with traditional commercial model because individual online behaviours and activities closely match their offline activities.

In this study, the researcher only focused on two online trading platforms, which are ecommerce and s-commerce. First, explore how the quality of e-commerce (system quality, service quality and information quality) will affect eTrust. Then, examine how eTrust and social commerce factors (performance expectancy, social influence, and habit) will affect online purchase intention. More specifically, this study attempts to answer these questions: (1) Does system quality, service quality and information quality have a positive impact on eTrust? (2) Performance expectation, social influence and habit have a positive impact on online purchase intentions? And (3) how would the eTrust and social commerce factors would influence the consumer purchase intention?

# **1.2 BACKGROUND OF STUDY**

B2C e-commerce competition has become increasingly fierce (Schmitz & Latzer, 2002). Merchants are searching opportunities to acquire new customer and at the same time working hard to retain their existing customers. Increase the customer purchase intention at online channel has become the only way (Chiu, Wang, Fang, & Huang, 2014). At the same time, the birth of s-commerce has overcome the problem of people-to-people in traditional e-commerce and offline trading (Huang & Benyoucef, 2013; Cyr, Head, Larios, & Pan, 2009).

"Internet Users Survey" conducted by Malaysia Communication and Multimedia Commissions (MCMC) in 2017 shown that there were 31.8 million of Malaysian population, and 89.3% of them are social media users. According to the same survey, the percentage of online shopping users has increased significantly from 35.3% in 2015 to 48.8% in 2016. In addition, the survey also analysed in detail the total amount of online shopping for Malaysian customers; a total of 64.7% of customers spend less than RM500, 21.7% of

customers spend between RM500 and RM1000, and 13% spend more than RM1000 per year.

The growth of e-commerce in Malaysia cannot be underestimated. Nguyen (2017) has pointed out that Malaysia is a very attractive Southeast Asian e-commerce market. Malaysia is a middle-income country with a population of more than 30 million and attracts local and global companies to take part and occupy the e-commerce market share here.

In the 2018 Asean Up market analysis, the five major trends in the e-commerce market in Malaysia are mentioned:

- Online shopping will continue to grow
- Payment methods will become digital
- Customers are willing to purchase new product categories
- Courier service will become the norm
- Customers will pay attention beyond the price



Top e-commerce sites in Malaysia by estimated monthly traffic

**Figure 1.2:** Top e-commerce sites in Malaysia by estimated monthly traffic. Adopted from Asean Up. (2018). Top 10 e-commerce sites in Malaysia 2018. Retrieved 30 May, 2018, from ASEAN UP: https://aseanup.com/top-e-commerce-sites-malaysia

*Figure 1.2* shows Lazada's strong dominance over the Malaysian market, with an estimated 45 million visitors per month. Lazada is not only an e-commerce leader in Malaysia, but also active in Indonesia, Philippines, Singapore, Thailand and Vietnam (Liu, 2017). Follow by 11street and Shopee ranked second and third, between 12 million and 13 million.

While generalist and specialist websites make up most of the Malaysian e-commerce, some specific brands are also attracted, for instance, Tesco and MBO Cinemas, which are leading the grocery and movie ticket markets respectively (Asean Up, 2018). Mudah.my is the leader of peer-to-peer (P2P) classified in Malaysia, with more than 20 million visitors monthly. Although it is not a pure e-commerce player, but it still allows buyers to purchase online in certain product categories.

# **1.3 STATEMENT OF THE PROBLEM**

Several research gaps were found in the preliminary study. One of the identified research gap is the limited study on how Malaysian's social activities and the e-commerce system would influence the consumer intention towards online purchase. The purpose of this study is wish to have a closer investigation on how these two factors would change the Malaysian consumer intention to purchase online. And, other constructs were also included in this study to further examine and understand the Malaysian consumer purchase intention.

Investigating the features of the information technology and Internet such as the quality of the e-commerce systems would help to better understand consumer behaviour (Hsu, Chang, & Chen, 2012) towards to the online purchase intention. Previous researchers found that there were positive relationship between quality of e-commerce towards customer purchase intention in China (Wang et al., 2015; Chen & Cheng, 2009). Therefore, this study wish to further investigate and determine how would the effect of quality of e-commerce in term of system quality, information quality, and service quality influence the intention of Malaysian to purchase online.

Brown, Broderick, & Lee (2007) in their study found that individuals like to share their own experiences on online social network and online communities. Online sharing

experiences are greatly provide a platform to have better understanding and allow online social interaction to exchange information and experiences, has significantly impact the consumer purchasing decision making. In their studies, the interaction on online social media take place, it is mainly assumed that there is a value of trust between individuals and social media. The previous researchers point out that the most social network that individuals choose to share their information was Facebook compared to others (Dwyer, Hiltz, & Passerini, 2007).

The emergence and development of information and communication technology (ICT) provides scholars with a new perspective to discuss trust in online environments – eTrust (Wang et al., 2015). Hence, further investigate on trust towards online purchase intention in Malaysia is necessary. More importantly, the lack of eTrust is considered to be a major obstacle to e-commerce (Liebermann & Stashevsky, 2002). Therefore, this study again would like to proof how would the effect of quality of e-commerce systems in term of system quality, service quality, and information quality will influence the eTrust, and later change the Malaysian online purchase intention where eTrust as a mediator.

In the UTAUT model, performance expectation factor is another important factors most use to explain the intention to purchase products or services. Several studies (San Martín & Herrero, 2012; Venkatesh, Thong, & Xu, 2012) identified that there is a positive relationship between performance expectancy and online purchase intention. Additionally, the same studies also mentioned that social influence affected the intention to purchase online. Therefore, the research can conclude that individuals are interested in shopping online because they imagine their referents, such as friends, family and colleagues, think that they should do so (Escobar-Rodríguez & Carvajal-Trujillo, 2014).

UTAUT2 is an extension of UTAUT in the consumer environment, which contains other structures related to the consumer, such as habits (Venkatesh et al., 2012). The habit of using e-commerce website will have a positive impact on the willingness to buy online (Escobar-Rodríguez & Carvajal-Trujillo, 2013). In this study, researcher will investigate the role of social activities, including performance expectancy, social influence, and habits, which will affect the intention to purchase online.

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# **1.4 RESEARCH OBJECTIVE**

The research objective is to determine the relationship between website qualities and social activities toward online purchase intention in Malaysia.

To be specific, this research study would like to:

- 1. To identify the individual perceived influence factors.
- 2. To examine the relationship between system quality, service quality and information quality towards eTrust.
- 3. To examine the relationship between eTrust, performance expectancy, social influence and habit towards online purchase intention.

# **1.5 RESEARCH QUESTION**

After determining the above research objectives, this study will address the following research questions.

- 1. Does the system quality has a significant positive influence on eTrust?
- 2. Does the service quality has a significant positive influence on eTrust?
- 3. Does the information quality has a significant positive influence on eTrust?
- 4. Does the eTrust has a significant positive influence on online purchase intention?
- 5. Does the performance expectancy has a significant positive influence on online purchase intention?
- 6. Does the social influence has a significant positive influence on online purchase intention?
- 7. Does the habit has a significant positive influence on online purchase intention?

# **1.6 SIGNIFICANT OF THE STUDY**

Information technology (IT) has dramatically changed the way of people doing business and social life, yet, so far no researchers have investigate how e-commerce (system qualify,

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information quality and service quality) and s-commerce (performance expectancy, social influence and habit) together would affect the consumer online purchase intention at the same time. Hence, in this study, the researcher will extract several research models from other fields in the past and make adjustments, and then propose a new framework to address this research topic problem.

From a practical perspective, this study will enable e-commerce system developers to have better understanding how important about the importance of website quality. Thus, system developers can refer to this study to improve their websites or applications to boost their business sale. Moreover, millennium and iGen are the main respondents to this study, and the researcher will clearly analyse their social activities, so system developers can refer to this study to strategically design and develop the e-commerce system based on the findings from this study.

Last but not least, this study also allows public to know more about the current shopping trends, customers no longer need to go to the physical store, but can do online shopping at home. In addition, this study also highlights the things that need to be taken care and avoided in online shopping, so everyone may have a good online shopping experience. Besides, the C2C model will also be introduced in this study, customers can have an idea how to buy and sell products online as a customer to another customer.

# **1.7 DEFINITION OF TERM**

In order to better clarify and understand the terms associated with this study, the following terms are conceptually and operationally defined.

Term	Definition	Author(s)
Online	Determine the chances of purchasing a product	(Whitlark, Geurts,
Purchase	within a specified time period.	& Swenson, 1993)
Intention		

E-commerce	The process of buying, selling or changing	(Turban, King, Lee,
	product, service or information using Internet,	Liang, & Turban,
	network technologies and information	2012)
	technology devices.	
S-commerce	An evolutionary e-commerce platform that	(Huang &
	includes word of mouth, social, creative and	Benyoucef, 2013)
	collaborative methods used in the online	
	marketplace.	
eTrust	A general view of the behavioural intent of	(Gentry &
	online sellers.	Calantone, 2002)
System Quality	The overall functionality of the website, which	(Lin, 2007)
	enables consumer to feel friendly.	
Service Quality	Ability to provide services that meet customer	(Lewis & Booms,
	needs.	1983)
Information	The information provided is accurate, relevant,	(Lim, Heinrichs, &
Quality	personalized, formatted, and easy to understand	Lim, 2009)
	to enhance purchase intention.	
Performance	Individuals believe that using a particular	(Venkatesh,
Expectancy	system can help to improve work performance.	Morris, Davis, &
		Davis, 2003)
Social	Individuals recognize the importance of others	(Venkatesh,
Influence	thinking that he or she should use this	Morris, Davis, &
	technology.	Davis, 2003)
Habit	Individuals think that the behaviour is	(Venkatesh, Thong,
	automatic	& Xu, 2012)

Sources: Developed for research.

# **1.8 CHAPTER LAYOUT**

This research study consists of five different chapters. Each chapter is linked to each other, giving readers a better understanding of the entire research process. Following are the brief introduction of each chapter in the study:

#### **1.8.1 CHAPTER 1: RESEARCH OVERVIEW**

Chapter 1, the introduction briefly discusses the development of e-commerce and the birth of s-commerce. In addition, an overview of the entire study and a description of online shopping trends will be discussed. Besides, problem statement, objectives, questions, significance study, term definitions, and last but not least chapter layout were shown in this chapter too.

#### **1.8.2 CHAPTER 2: LITERATURE REVIEW**

In Chapter 2, the literature review will show the findings of factors that are supported by articles or journals. These factors include independent variables, website quality (system quality, quality of service and information quality) and social activities (performance expectations, social influences and habits). Also, the dependent variable is the online purchase intent with the mediator, eTrust. In addition, this chapter explains the relevant theoretical frameworks for e-commerce and s-commerce. At the end of this chapter, a new conceptual framework and hypotheses will be introduced to explore this research topic.

#### **1.8.3 CHAPTER 3: RESEARCH METHOD**

Chapter 3 discusses the research design of this study. In the beginning of this chapter, it describes the research data sampling, data collection, research instrument, data processing and data analysis used to conduct this study. Besides, pilot tests were conducted prior to large-scale quantitative studies to avoid wasting time and money wasted on poorly designed research.

#### **1.8.4 CHAPTER 4: DATA ANALYSIS**

In Chapter 4, the researcher will analyses the results collected which obtained from the questionnaire. All valuable data collected from the survey will be tested on Statistical Package for Social Sciences (SPSS) software. In fact, SPSS is a very powerful tool for

processing and decrypting survey data. The results are described in tabular form, which can be better understood by researcher and readers.

### **1.8.5 CHAPTER 5: DISCUSSION AND CONCLUSION**

Chapter 5, the researcher will discuss the results of the study and explain whether the data supports these hypotheses. In addition, this chapter will discuss limitations and recommendations for future research as well.

# **CHAPTER 2**

# LITERATURE REVIEW

At the beginning of this chapter, the researcher discusses the background and trends in ecommerce. Theoretical theories and models used by other researchers will be thoroughly studied and reviewed. At the end of this chapter, the researcher proposed the research study framework for this research topic, as well as the formulated hypotheses.

# 2.1 TECHNOLOGICAL CHANGE

In the 1980s, "interactive" technology began to proliferate. These include video games and proprietary computer-based communication systems such as CompuServe and Prodigy (Pavlik, 1996). Later in the 1990s, the Internet began to transcend its roots in research, and since 1993 it has accessed the Internet extensively through the first web browser (Leiner, et al., 2009). Besides, a previous study conducted by Jones (2002) showed that the 18-24 age group was an early adopter and a heavy user of the Internet. These young people are at the stage of studying and learning, so they are more willing to try to accept the emergence of the Internet.

The World Wide Web (Web) of the Internet is a strategic IT that has the potential to change the basic rules of business interaction with customers (Rayport & Sviokla, 1995). The great expectation surrounding consumer potential for the Web is driven by its perceived business advantages, social demography changes, and the unique capabilities of the Web as a direct marketing channel (Jarvenpaa & Todd, 1996). Direct marketing channels provide a broadcast model network that supports two-way communication between merchants and consumers. The network also provides a time and geographically independent direct marketing channel and supports a variety of retail methods that go beyond traditional commercial markets (Hoffman, Novak, & Chatterjee, 1995).

The use of the Internet as a shopping and buying medium has seen unprecedented growth (Limayem, Khalifa, & Frini, 2000). In the past decade, the growth of online shopping and the level of competition in cyberspace have increased (Al-Debei, Akroush, & Ashouri, 2015). This revolutionary IT great impact to the consumers' purchasing behaviour and lifestyles, and has change the current business model. The Internet has the capabilities to integrate various technologies and business operations to offer more convenient and user friendly online application platform to ease the shopping and payment.

The advancement of IT, Web 2.0 and Web 3.0 evaluation and increase the human machine interactivity in an online shopping environment, which have tremendously changes the way of online customers searching product information and purchase decisions (Alba, et al., 1997). Such technology is especially valuable because it compensates or overcomes the limitation of online stores unable to provide physical contact as usually can be provided by sales attendants at physical store. The online user generated content such as feedback, review, rating and word of mouth. Furthermore, online stores have almost no limit on the number of displays. For example, a website may display a large number of alternatives, and customers can make purchasing decisions more easily with the help of interactive decision aids (recommendation agent and comparison matrix) (Häubl & Trifts, 2000).

In general, as current technology changes, there are many aspects of e-commerce that can have similar capabilities as offline retail (Rowett, 2011). Therefore, merchants can engage customers through search engine marketing and build their stores through web development. In addition, the e-commerce has a significant advantage. In the real world, physical store merchants cannot test multiple versions of store decorations to determine which one is the best, but online can do so.

Online store	Retail store	
Shop front	Website design	
Customer service	Website usability	
Line of sight	Above the fold	
Changing rooms and display items	Images and descriptions	
Salesmen	Behavioural targeting	

**Table 2.1:** Compare the similarities between online store and retail store.

# **2.2 E-COMMERCE**

In the past few years, the Internet has established a communications revolution with the ability to send and retrieve information around the world. At the same time, the Internet has also changed the way people live and work. Web is considered content aggregator that provides effective information and online services (O'Murchu, Breslin, & Decker, 2004). The web is an electronic gateway that provides several links to other Internet sites and has a personalized source of information. As a result, users such as profit and non-profit organizations have reduce time-consuming tasks such as information dissemination and management tasks by using Internet and web technologies.

Online retail or online shopping is a form of e-commerce that allows merchants and consumers to trade goods or services directly via the Internet using a Web (Laudon & Traver, 2013). E-commerce is no longer new, and people are used to trading in this way. Slowly it has become a habit for consumers to make purchases on the Internet, leading to the rapid growth of e-commerce in the B2C. The impact of e-commerce may be most evident in the retail and financial services arena (Gunasekaran, Marri, McGaughey, & Nebhwani, 2002). These initiatives involve online banking, online stock trading, online retailing and innovative smart cards to promote e-commerce, remote payment and e-check. After that, people began to realize that it could provide a lot of different data from all over the world. Get millions of websites with just one click, opening up new opportunities for trade and data exchange. It has become part of people's daily lives, just like using smartphone and watching television.

Many authors have discussed the use of e-commerce to enhance the service quality. For example, Ghosh (1998) explained that companies can develop enhanced services by personalizing interactions with customers by tailoring the information and options customers see on the company's website. E-commerce also provides opportunities for companies to engage in conversations with customers. Besides, companies should get rid of traditional sales methods when using the ecommerce (Wilson, Daniel, Sutherland, McDonald, & Ward, 2001). Companies should be prepared to connect with customers, then engage in two-way conversations with them, and be prepared to tailor products and services to their individual needs, rather than providing standard information and completing sales.

# **2.3 S-COMMERCE**

The first recognized as a social media site (SNS) was SixDegrees.com, which was created in 1997 (Boyd & Ellison, 2007). SixDegrees.com allows users to create personal profiles, as well as list their friends; and browsing the friends list has become a trend since 1998. Although SixDegrees.com has attracted millions of users, yet it has not been a sustainable business, and the service was closed in 2000.

In 1999, the first blog sites became popular, creating SNS that is still popular today (Junco, Heiberger, & Loken, 2011). The blog sites that appeared in the same year include LiveJournal and Blogger. The concept of writing a blog is like writing a diary. Bloggers write a variety of topics, and then they will be happy to share the details of their personal lives, furthermore these topics are not subject to any broadcast restrictions.

After the invention of the blog, social media has received more and more attention. Other SNS such as MySpace and LinkedIn gained prominence in the early 2000s (Jansen, Zhang, Sobel, & Chowdury, 2009), while sites such as Photobucket and Flickr promoted online photo sharing (Van House, 2007). Then came the release of YouTube in 2005, providing people with a new way to communicate and share with each other (Baluja, et al., 2008). It has become a popular SNS for users to find videos and share their videos.

Today, there are a wide variety of SNS, many of which can be linked to allow crosspublishing (Culnan, McHugh, & Zubillaga, 2010). This creates an environment where users can reach the largest number of people without sacrificing intimate relationships between people. Web 2.0 and Web 3.0 applications are driving this advancement, and as online communities and SNS grow, people can easily access and share information (Hajli, 2014).

SNS has added value to businesses, such as promoting word-of-mouth communication, increasing brand awareness, providing social support to consumers, increasing sales and sharing information in a business context. At the same time, due to the rapid growth of Web 2.0 and Web 3.0, e-commerce has moved from a product-oriented approach to social marketing customer orientation concept (Huang et al., 2013). As a result, consumers can gain more experience and knowledge on social media to better understand online shopping and make smarter and effective purchasing decisions.

Social media has become popular and it has created a new subset platform in e-commerce called s-commerce (Kaplan & Haenlein, 2010). With the approach of the s-commerce platform, merchants can more clearly capture customer behaviour and better understand their shopping expectations and experiences. This helps online merchants develop effective business strategies for their business. Besides, in the s-commerce platform, it encourages users to sell products or services or share product information with other online users through SNS (Liang, Ho, Li, & Turban, 2011). Simultaneously, online customers also can consult their social community to consider and decide their online purchasing decisions based on recommendations.

The use of the Internet has helped many different types of businesses enter the world market. Especially in e-commerce, the development of the Internet and SNS has helped a lot. Additionally, by using social media, merchants can capture their customer behaviour based on their shopping experience and expectations, and begin to provide relevant product information to their target online customers. At the moment, the number of social media user is still continue growing, and businesses across all industries are trying to figure out how to use SNS more efficiently, so they can get millions of consumers who use social media every day (Parsons, 2011).

# 2.4 TRUST IN E-COMMERCE

The Internet is expected to revolutionize the way consumers can choose to shop and collect information (Wang, Lee, & Wang, 1998). However, this required the customer to voluntarily trade with new and unfamiliar suppliers on new system, then only can realize the great potential of e-commerce (Gefen & Straub, 2003a). However, a study by Hoffman, Novak and Peralta (1999) pointed out that nearly 95% of consumers refused to provide personal information to the site, and 63% said it was because they did not trust those person who collected the data. In a broad sense, trust is to believe that others will react in a predictable way (Luhmann, 2018). Trust is very important to people because they are used to control, where trust can reduce their sense of uneasiness. However, it is not easy for people to fully understand the complex society because people have their own personalities, and their intentions and behaviours cannot be controlled and unpredictable. It can be seen that decision of consumers to trade on e-commerce not only involves their perception of technology, but also the trust of online merchants.

Eventually, trust is important in adopting new technologies, including e-commerce and scommerce (Koniordos, 2017). At the same time, Roghanizad & Neufeld (2015) also pointed out that building consumer trust in online merchants is crucial to the development of e-commerce. Conversely, consumer lack of trust in the Internet can hinder their adoption of e-commerce (Bhattacherjee, 2002). It also can be concluded that trust is seen as one of the most important success criteria for determining e-commerce turnover (Sparks, So, & Bradley, 2016).

The trading process of online stores are different from retail stores (Yu, Balaji, & Khong, 2015). Traditionally, physical retail stores have focused more on face-to-face communication. However, the trading process of online stores are performed remotely without human interaction. Additionally, in physical retail store, consumer purchasing decisions about when relate to trust are often influenced by intrinsic clues such as colour, music, store layout, or past experiences from similar places and atmosphere (Ogonowski, Montandon, Botha, & Reyneke, 2014). Unfortunately, in a remote environment especially in the cyberspace, everything can only be based on the factors such as website quality, the perceived risk of executing a transaction, and the consumer's trustworthiness assessment.

Previous researchers believe that the degree of e-commerce success depends directly on the degree of consumer trust in IT (Gefen, Karahanna, & Straub, 2003b). Lack of consumer trust is still considered to be a major obstacle to online business success (Kim & Peterson, 2017). If consumers are unable to develop a degree of confidence, predictability, benevolence and trust among the merchants, they are not likely to purchase and will look for trustworthy alternatives elsewhere (Lu, Fan, & Zhou, 2016).

Liu, Marchewka, Lu and Yu also did a study in 2005 to support the importance of trust in e-commerce and created a research model privacy-trust-behavioural intention model.



**Figure 2.1:** Privacy-trust-behavioral intention model. Adopted from Liu, C., Marchewka, J. T., Lu, J., & Yu, C. S. (2005). Beyond concern—a privacy-trust-behavioral intention model of electronic commerce. Information & Management, 42(2), 289-304.

Privacy-trust-behavioural intention model may seem simple, but it is not simplistic. Since online store image is an important predictor of online purchase intention. Heijden & Verhagen (2002) has developed reliable and effective measures, including practicality, enjoyment, ease-of-use, store style, familiarity and credibility of online stores. And, their findings support trust as a key factor affecting online purchase intention.

The findings of the study above was privacy has a big impact on whether individuals trust e-commerce. In turn, it will affect their intention to purchase or visit the sites again, positive assessment of the electronic business, and whether they willing recommend the ecommerce to others.

# **2.5 THEORECTICAL FRAMEWORK**

Researcher will refer to the past research models to promote a new research model for this research topic. Including, theory of reasoned action (TRA), theory of planned behaviour (TPB), technology acceptance model (TAM) and Unified theory of acceptance and use of technology 2 (UTAUT2).



### 2.5.1 THEORY OF REASONED ACTION

**Figure 2.2:** Theory of reasoned action. Adopted from Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behavior: An introduction to theory and research.

One of the most extensive and influential research in the history of social psychology is the TRA develop by Fishbein and Ajzen in 1975. The closest cause of describing behaviour is behavioural intention (intend to do or not intend to do). Conversely, behavioural intention depends on attitudes (behavioural evaluation) and subjective norms (evaluation of what others think they should do), any of these may be the crucial determinant behaviour.

In the studies of Fishbein and Ajzen, (1975), a critical factor to predict purchase intention. According to TRA, the intention to participate in behaviour is a good prediction of the behaviour itself. The main assumption of the theory is that the behaviour is under the volition of the subject, meaning that the subject has control to perform or not to perform certain behaviour.

TRA does not consider the effects of control factors. TRA assumes that the user has fully control or adopted a technology, and such adoption behaviour is not affected by the user's capabilities and external support (Min, Ji, & Qu, 2008). But in reality, this is a very rare situation. Later developers discovered the limitations of TRA, so they modified TRA and proposed a new model called TPB.

#### 2.5.2 THEORY OF PLANNED BEHAVIOUR



**Figure 2.3:** Theory of planned behaviour. Adopted from Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. Berlin: Springer.

TPB is considered to be the best model for predicting purchase intent (Yadav & Pathak, 2016). TPB extends TRA by introducing a third variable to control beliefs, taking into account the fact that constraints exist in reality and that intentions do not necessarily translate into behaviour (Ozaki & Sevastyanova, 2011). Controlling beliefs is how easy or difficult people are to behave about their abilities, resources, and opportunities. TRA and TPB assume that human behavior is reasonably chosen by the practitioner and that the decision is intentionally based on a particular goal.

TRA considered as one of the most widely studied models of social psychologists for predicting behavioural intent (Fielding, McDonald, & Louis, 2008). Intention is a conscious action plan that requires a behaviour and motivation to drive it (Patch, Tapsell, & Williams, 2005). Many studies describe intentions and are considered to be the best predictors of behaviour and fully regulate the impact of attitudes, subjective norms, and perceived behavioural control (Liobikienė, Mandravickaitė, & Bernatonienė, 2016; Zhao, Gao, Wu, Wang, & Zhu, 2014). More specifically, the intent is accepted as the best available predictor of human behavior, which is at the core of the TPB.

For many studies, the theory seems to be very suitable for investigating the purpose of consumer online shopping behaviour (Shim, Eastlick, Lotz, & Warrington, 2001; Klein, 1998). Consumers may experience obstacles and difficulties in performing online shopping behaviour. Therefore, as a researcher, perceived behavioral control should be considered because online shopping does require skills, opportunities, and resources, so it does not happen simply because the consumer decides to take action.

#### 2.5.3 TECHNOLOGY ACCEPTANCE MODEL



**Figure 2.4:** Technology acceptance model. Adopted from Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 319-340.

TAM was developed by Davis (1989), one of the most popular research models for predicting the use and acceptance of information systems and technologies by individual
users. In TAM, there are two factors, which are perceived usefulness and perceived ease of use are related to computer usage behaviour.

Davis (1989) defines perceived usefulness as a subjective probability of the intended user, using a particular application system will enhance his or her work or life performance. Nevertheless, perceived ease of use defined as the degree to which the intended user is expected to the target system to be effortless. The main external factors are social factors and political factors. Social factors include language, skills and conveniences. And, the political factor is mainly the influence of technology in political and political crises.

In fact, TAM can partially explain online purchase intention (Chiu, Chang, Cheng, & Fang, 2009). However, there are differences between the use of the website and online shopping. Therefore, TAM needs to be extended by merging other variables to adapt it to the online shopping environment and improve its interpretation (Moon & Kim, 2001).

TAM initially focused on adopting of using new IT in the workplace. Therefore, Chui et al. (2009) proposed a model to integrate other variables that are important to the maintainability of the relationship between buyer and seller, such as the dimensions of trust and service quality. Trust is considered to be due to the uncertainty of the online shopping environment and information asymmetry. Service is an important part of a customer-centric business strategy and the key to e-commerce success. Besides, previous studies (Childers, Carr, Peck, & Carson, 2001; Overby & Lee, 2006) have pointed out that TAM is suitable in examine e-commerce by adding enjoyment or playfulness as a hedonic factor, and found that utilitarianism and hedonic factors have different effects on customers' intentions to online shopping.

### 2.5.4 UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY 2



**Figure 2.5:** Unified theory of acceptance and use of technology 2. Adopted from Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. MIS Quarterly, 157-178.

The UTAUT model has four core determinants of usage and intent, including performance expectancy, effort expectancy, social influence, and facilitating conditions (Venkatesh, Morris, Davis, & Davis, 2003). Besides, it also includes four moderators of main relationships, including gender, age, experience and use of voluntary. In UTAUT, facilitating conditions is hypothesized to influence technology use directly based on the idea that in an organizational environment, facilitating conditions can serve as the proxy for actual behavioural control and influence behaviour directly.

Since the UTAUT model includes factors such as TRA, TPB, and TAM that are included in the model, it is the most comprehensive factor with a wide range of factors and strong explanations (Min et al., 2008). It is considered to be the most important theory for the future adoption of IT in the IS field. However, UTAUT is not perfect. To apply UTAUT to certain special IT applications (such as e-commerce), it needs to be modified and revised (Venkates et al., 2003)

UTAUT2 (shown in *figure 2.5*) is the latest model extended from UTAUT, focusing on the personal perspective of technology adoption. UTAUT2 has been used to explore self-service technology services, smart mobile device adoption, learning management software acceptance and healthcare industry.

# 2.6 PROPOSED CONCEPTUAL FRAMEWORK

After go through the thorough literature review and model study, this research study proposed the following conceptual framework as illustrated in the *figure 2.6* below.



Figure 2.6: Proposed framework.

This conceptual framework (*figure 2.6*) will be divided into e-commerce (system quality, service quality and information quality) and s-commerce (performance expectancy, social influence and habit). In e-commerce is mainly to test how website qualities influence online purchase intention with the eTrust as mediator. While, s-commerce is to examine how the social activities direct influence their online purchase intention among the millennial and iGen in Malaysia.

# 2.7 HYPOTHESES OF THE STUDY

With reference to the proposed framework illustrated above, the following hypotheses that are corresponding to the study are as follows.

### 2.7.1 SYSTEM QUALITY

System quality is the basic condition of e-commerce system. The elements of system quality include the practicality of the system (ease of navigation), accessibility (easy to use interface that allows customer to accomplish specific purpose), reliability (stable and not easy to collapse), suitability (can be adjusted to meet customer needs) and response time (respond to the customer and load the website with the shortest possible time) (Delone & Mclean, 2004). System quality exhibits the overall functionality of the website, when using the website (Lin, 2007). Meanwhile, Kim and Peterson (2017) in their study on "A meta-analysis of online trust relationships in e-commerce" proven the system quality has a positive influence on eTrust. Hence, system quality is added to this study to further verify how it would influence the online shopping consumer on the e-trust.

### Hypothesis 1

H1<sub>0</sub>: System quality has no significant positive influence on eTrust.

H1<sub>A</sub>: System quality has a significant positive influence on eTrust.

### 2.7.2 SERVICE QUALITY

The conceptual definition of service quality was developed by Parasuraman (1988) to compare the excellence of customer service. Afterward, Lewis and Booms (1983) explained that the service quality is an assessment that defines the ability to deliver services to meet the customer needs. The method that commonly used to evaluate online service was SERVQUAL (Delone & McLean, 2003). This was based on the customer's point of view of assessing service quality by comparing the expected service provided with actual service perceptions obtained from specific service providers. Yang, & Fang, (2004) found that there were several key dimensions of online service quality such as content, customization, reliability, and response have a significant impact on perceived usefulness. Besides, Gao, Waechter and Bai (2015) in their study on "Understanding consumers' continuance intention towards mobile purchase" proven the service quality has a positive influence on eTrust. Hence, service quality is added to this study to further verify how it would influence the online shopping consumer on the e-trust.

#### Hypothesis 2

H2<sub>0</sub>: Service quality has no significant positive influence on eTrust.

H2<sub>A</sub>: Service quality has a significant positive influence on eTrust.

### 2.7.3 INFORMATION QUALITY

Information quality means the information provided was accurate, relevant, personalized, formatted, and easily understood to encourage purchase intention (Lim et al., 2009). Rai, Lang, & Welker (2002) explained that the information quality was the degree of perceived usefulness of the output provided by the website. Studied by Bellman, Lohse, & Johnson (1999) shown a successful website with high quality of information can help individuals to make a better online purchase decision. And, there was a positive relationship between information quality of e-commerce and eTrust shown in the study of "Influence of trust and perceived value on the intention to purchase travel online" (Ponte, Carvajal-Trujillo, & Escobar-Rodríguez, 2015). Hence, information quality is added to this study to further verify how it would influence the online shopping consumer on the e-trust.

### Hypothesis 3

H3<sub>0</sub>: Information quality has no significant positive influence on eTrust.

H3<sub>A</sub>: Information quality has a significant positive influence on eTrust.

# 2.7.4 eTRUST

Electronic trust or eTrust in short, is defined as the attitude of confidence of the online risk expectations (Corritore, Kracher, & Wiedenbeck, 2003) in online shopping. In general, trust plays a central role in online shopping because consumers will hesitate to buy if they feel uncertain and risky (McKnight, Choudhury, & Kacmar, 2002). Yet, Wang, & Emurian (2005) believe that, in the near future of online shopping, it all depends on trust. Consumers who perceived the high value of trust to an e-commerce system, the higher their intention to purchase online (Al-Debei et al., 2015). Hence, eTrust is added to this study to further verify how it would influence the online shopping consumer.

# Hypothesis 4

H4<sub>0</sub>: eTrust has no significant positive influence on online purchase intention. H4<sub>A</sub>: eTrust has a significant positive influence on online purchase intention.

# 2.7.5 PERFORMANCE EXPECTANCY

The performance expectancy in a consumer context refers to the extent to which technology is used to benefit consumers when performing certain activities (Venkatesh et al., 2012). However, in the networking arena, it is widely believed that if individuals believe that these particular systems are more effective, useful, and save time and effort, they will be more willing to adopt the new system (Alalwan, Rana, Dwivedi, & Algharabat, 2017). Chang, Yu and Lu (2015) pointed out that usefulness is a factor that approximates the performance expectancy of customer preferences, such as intent to like and share posts. Recently, Indrawati and Riyadi (2016) support that there is a strong and positive relationship performance expectancy and online purchase intention. Hence, performance expectancy is added to this study to further verify how it would influence the online shopping consumer. <u>Hypothesis 5</u>

H5<sub>0</sub>: Performance expectancy has no significant positive influence on online purchase intention.

H5<sub>A</sub>: Performance expectancy has a significant positive influence on online purchase intention.

### 2.7.6 SOCIAL INFLUENCE

Many studies have found that social influences have a positive impact on individuals' IT usage (Ting, Ting, & Hsiao, 2014; Cheung, Chiu, & Lee, 2011). Social influence is the extent to which consumers think their peers (e.g. family and friends) believe that they should use the particular technology. Additionally, the reference group theory also emphasizes that the behavior of the consumer (e.g. purchase decision) may be influenced by the opinions of their peers (Kotler, 2006). And, the influence of this reference group has similar effects as other social factors and can be regarded as a direct determinant of behavioural intentions (Thompson, Higgins, & Howell, 1991). Moreover, Hsu and Lin (2016) support that social influence and online purchase intention are positive related. Hence, social influence is added to this study to further verify how it would influence the online shopping consumer.

### Hypothesis 6

H6<sub>0</sub>: Social influence has no significant positive influence on online purchase intention. H6<sub>A</sub>: Social influence has a significant positive influence on online purchase intention.

### **2.7.7 HABIT**

Habits are often defined as a sequence of behaviours that have become an automatic response to a particular situation, which this may work in getting some goals (Verplanken, Aarts, & Van Knippenberg, 1997). Previous researchers have also assumed that habits are behavioural tendencies caused by past experiences, and that people do not engage in rational assessments before engaging in social or economic behaviour (Khalifa & Liu, 2007). In this study, the hypothesis of habit has a significant positive influence on online

purchase intention is supported by Hsu & Lin, 2015. Hence, habit is added to this study to further verify how it would influence the online shopping consumer.

## Hypothesis 7

- H7<sub>0</sub>: Habit has no significant positive influence on online purchase intention.
- H7<sub>A</sub>: Habit has a significant positive influence on online purchase intention.

# **CHAPTER 3**

# **RESEARCH METHOD**

The following chapter describes the research methods used in the study and introduce test used to test the hypotheses formulated in the Chapter 2. In more details, the purpose of this study was to study how these independent variables, website qualities (system quality, service quality and information quality) and social activities (performance expectancy, social influence and habit) affect the dependent variable, online purchase intention with the mediator variables, eTrust.

### **3.1 RESEARCH DESIGN**

Combined the philosophy, strategies, and methods, the researchers can provide different frameworks for conducting research (Creswell & Creswell, 2017). Moreover, research design is like a researcher answering a research question or examining the overall hypothesis of the research study (Polit, Beck, & Hungler, 2006). Thus, the researcher has chosen quantitative approach and descriptive design to conduct this research topic.

#### **3.1.1 QUANTITATIVE APPROACH**

According to Richard (2013), quantitative approach is more scientific when conducting social science research. It focuses primarily on the use of specific definitions and is

represented by specific concepts and variables. In addition, the results of the study were revised in numbers, which allow researcher shorten the analysis time and has a better knowledge about the relationship between independent and dependent variables.

#### **3.1.2 DESCRIPTIVE DESIGN**

According to de Jong and Van Der Voordt (2002), descriptive design seek to provide an accurate description of observations of a certain natural phenomena. The purpose of collecting census data is to accurately describe the basic demographic information of a country at a particular point in time. Therefore, this design is very useful to describe the respondent's intention to purchase online after obtain the feedback from the respondent at a single point in time by distributed the questionnaires.

## **3.2 DATA COLLECTION METHOD**

The data collection method is a term that describes the process of preparing and collecting data. In this study, the primary data will be used to answer research questions and the hypotheses stated in Chapter 1 and 2.

### **3.2.1 PRIMARY DATA**

According to researchers, Hox & Boeije (2005), the primary data is defined as the data or information that the researcher collects specifically for the research task. All the primary data collected in each research will be added to the existing social knowledge base. Furthermore, questionnaire survey is defined as the method that is commonly used and can provide data systematically directly from the population or its sample.

In this study, questionnaire will be used to obtain the primary data as it is more reliable and objective. First, the researcher distributed total of 300 sets of offline questionnaire to different demographic respondents at different location. While Google form is used to

collect online survey to reach greater demographic result. Next, the returned questionnaire will be analysed and a conclusion will be drawn.

# **3.3 SAMPLING DESIGN**

The sampling process uses a subgroup of population with the same characteristics to represent the entire population (Zikmund, 2003). Besides, the purpose of the sampling design is to help researcher obtain more reliable data or information in less time and to complete the study in an inexpensive way.

## **3.3.1 TARGET POPULATION**

In this study, the targeted research populations are the combined elements which have some common characteristics, which is to provide relevant information that the researcher wants to seek. The targeted population of the study focused on the Malaysian population of the Millennium and iGen. Based on MCMC (2017) statistical report, the millennial and iGen are the main age groups for online shoppers, accounting for three-quarters of online shoppers. In addition, Farag, Schwanen, Dijst, & Faber (2007) also support that younger generation is more positive about Internet experiences and online shopping than older generation. There may be some technical challenges when shopping online, and young people will be more willing to try and overcome it.

### 3.3.2 SAMPLING FRAME AND SAMPLING LOCATION

Refer to the findings from the researcher Zikmund (2003), the elements of the sample can be drawn in the sampling frame. The sampling frame is used to identify the elements of the population. Each element in the sampling frame has the same chance of being selected as the respondent. First, the researcher will deliver the questionnaire directly to the respondent and then collect back the questionnaire on the spot after the respondent completes. The questionnaire will be distributed to respondents at the universities and shopping malls that located in Klang Valley, as the number of universities and shopping malls exceeds the number of other states in Malaysia. It can be seen that the respondents is more focus and making it easier for researchers to deliver and collect questionnaires.

On the other hand, online survey is conducted using Google Forms. Google Forms is user friendly and offers powerful features. In addition, online survey provides researcher with the convenience of accessing more potential samples around Malaysia (Wright, 2005). At the same time, it also allows researcher to collect and analyse data faster and organize with real-time response information, charts, etc.

#### **3.3.3 SAMPLING ELEMENTS**

The sampling elements of this study were limited to respondents under the age of 40, as the millennium and iGen were the target respondents to the study. Furthermore, Dan, Xu, & Liu (2012) suggested looking for respondents with have basic knowledge of Internet operations and online shopping experience in order to get more accurate results.

#### **3.3.4 SAMPLING TECHNIQUE**

There are two main sampling techniques, which are probability sampling and nonprobability sampling. In this study, researcher used non-probability sampling as a sampling technique. Moreover, convenient sampling (paper survey) and snowball sampling (online survey) are being selected.

Ballou & Lavrakas (2008) pointed out that convenience sampling is different with purposive sampling in terms of no expert judgment in selecting a representative sample of elements. Instead, the researcher can gather data from the respondents nearby. Besides, snowball sampling is based on the concept of snowballing, also known as reputational sampling. The samples obtained are all linked to the initial sample (Neuman, 2005).

Researcher selected convenience sampling and snowball sampling for this study because search costs and time required are short compared to probability sampling techniques. At the same time, researcher can achieve the required sample size in a relatively fast and inexpensive manner.

### 3.3.5 SAMPLING SIZE

Based on the above sampling technique, 300 questionnaires were randomly distributed among the target respondents through direct hand out and Internet. In addition, the researcher has return the details on the cover of the questionnaire, such as research purpose, research topic, procedures, etc. Respondents were asked to answer questions based on their intention to online shopping. At last, a total of 273 questionnaires were collected.

# **3.4 RESEARCH INSTRUMENT**

Research instrument describe the tool used for data collection. These include questionnaire, interview, observation and reading. The researchers had chosen self-administered questionnaire to conduct this study. According to Hair (2015), self-administered questionnaires are simple and effective, inexpensive and is the fastest method used to collect primary data from a greater number of respondents.

### **3.4.1 QUESTIONNAIRE**

According to study by Mathers, Fox, & Hunn (2007), the questionnaire may be low-cost compared to individual interviews and faster for large dispersive samples and a very high response rate. Besides, questionnaire is the perfect tool for obtaining information about social characteristics, current and past behaviours, standard behaviours or attitudes, and their beliefs and justifications for taking action on topics within the social sciences.

In the context of online survey, Fricker & Schonlau (2002) explained that online survey has the potential to achieve effective methods of collecting data and cost-effectiveness. Furthermore, the importance of the Internet for certain types of research study will continue to increase.

### **3.4.2 QUESTIONNAIRE DESIGN**

This questionnaire is a self-administered statistical survey presented in English as this is the common language of all respondents. Brief information about research topics and procedures is clearly stated on the cover of each questionnaire. In addition, the questionnaire is using closed-ended questions because it is easier for respondents to make quick and clear responses than open-ended questions.

Section A consists of 14 questions about the basic information of the respondents. And these questions are used to accumulate a better understanding of their demographics. The questions include gender, age, race, education qualification, marital status, employment status, household income, number of visits to online shopping websites, number of times to purchase products or services online, most frequently used online shopping website, most commonly used device for online shopping, type of product or service that is usually purchased online, online shopping experience, and biggest concerns about online shopping.

Section B is regarding to the factors that influence the intention to purchase online. There are consists of 41 questions and divided into 8 parts – system quality, service quality, information quality, eTrust, performance expectancy, social influence, habit, and online purchase intention. The respondents are required to tick one number that represents the most accurately answer on their opinion on the 5-point Likert scale.

### **3.4.3 PILOT TEST**

The main purpose of the pilot test is to conceptualize and re-conceptualize research, and is preparing for field work and analysis, so there will be no errors in the final questionnaire and no content will be missed (Oppenheim, 2000). Besides, pilot test should be conducted

with a small number of respondents who are as similar as possible to potential respondents, and pilot tests need to be distributed prior to the actual survey to ensure that the collection of questionnaires is understandable and reliable.

According to Lackey & Wingate (1997), 10% of the sampling size will be suitable for pilot test. In this study, a group of 30 respondents which are the students from the Universiti Tunku Abdul Rahman (UTAR) were randomly selected to complete the pilot test. This group of respondents is being selected is because of their similarity characteristics with the actual targeted group of respondents. It is believes the results obtained in this study would more reliable.

The reliability test for the pilot test was conducted by the SPSS. If Cronbach's Alpha shows less than 0.60, it means poor reliability; between 0.60 and 0.70 is acceptable; above 0.70 means good reliability results (Saunders, Lewis and Thornhill, 2009).

Variable	Cronbach's Alpha	Number of Item(s)
System Quality	0.883	6
Service Quality	0.866	6
Information Quality	0.842	6
eTrust	0.765	7
Performance Expectancy	0.773	4
Social Influence	0.923	5
Habit	0.892	4
Online Purchase Intention	0.911	3

**Sources:** Reliability test result of the study.

# **3.5 CONSTRUCT MEASUREMENT**

In order to evaluate the hypothetical and their relationship between abstract structures, researcher must transform structures into concrete and observable variables. In this study, the construct was translated into numerical code.

The level of measurement can be divided into 4 categories. However, only three categories were used in section A of this study - nominal scale, ordinal scale and interval scale. Next, the researcher selected 5-point Likert scale instead of the 7-point Likert scale in Part B of this study to measure the perception of respondents. According to Gwinner (2006), the most modern researchers agreed to use a 5-point Likert scale when conducting the survey.

Section A			
Level of Measurement	Measurement Item(s)		
Nominal Scale	• Gender		
	• Race		
	Marital Status		
	• Employment Status		
	• Most Frequently Used Online Shopping Website		
	Most Commonly Used Device For Online Shopping		
	• Type of Product or Service that is Usually Purchased		
	Online		
	Online Shopping Experience		
Ordinal Scale	Education Qualification		
	Biggest Concerns about Online Shopping		
Interval Scale	• Age		
	Household Income		
	• Number of Visits to Online Shopping Websites		
	• Number of Times to Purchase Products or Services		
	Online		

### **3.5.1 SCALE OF MEASUREMENT**

Section B			
5-point Likert Scale	System Quality		
	Service Quality		
	Information Quality		
	• eTrust		
	Performance Expectancy		
	Social Influence		
	• Habit		
	Online Purchase Intention		

**Sources:** Scale of measurement.

### **3.5.2 ORIGIN OF CONSTRUCT**

The following are the measurement of each construct. Measurement items in the following construct are adapted and based on numerous sources through literature review conducted at the earlier study. The following table shows all the questions that will be asked in each variable:

Sys	stem Quality - Ahn, Ryu, & Han (2007)
1.	The website has an appropriate design style.
2.	The website is easy to navigate information.
3.	The website has fast response and transaction processing.
4.	The website protects personal information secure from exposure.
5.	The website provides relevant and good features.
6.	The website ensures error-free transactions.
Ser	rvice Quality - Ahn, Ryu, & Han (2007)
1.	The website responds to user needs and requests without delay.
2.	The website promises to be trusted.
3.	The website can instil user confidence and reduces uncertainty.
4.	The website understands and adapts to the specific needs of users.
5.	The website provides follow-up services to users.
6.	The website provides a professional and capable image.

### Information Quality - Ahn, Ryu, & Han (2007)

- 1. The website has sufficient content to find expected information.
- 2. The website provides complete information.
- 3. The website provides site-specific information.
- 4. The website provides accurate information.
- 5. The website provides timely information.
- 6. The website provides reliable information.

### eTrust - Li, Peng, Jiang, & Law (2017)

- 1. The website can handle sales transactions via the Internet.
- 2. The website does not deceive customers.
- 3. The website fulfils its commitments.
- 4. The website provides reliable information.
- 5. The website is designed to consider the needs of consumers.
- 6. The website recommendations are developed for mutual benefit.
- 7. I kept my personal information on the website when buying product online.

## Performance Expectancy - Escobar-Rodríguez, & Carvajal-Trujillo (2013)

- 1. I found that social networking sites to be very useful during the purchase process.
- 2. Using social networking sites have increased my chances of achieving things that are important to me during the purchase process.
- 3. Using social networking sites can help me get things done faster during the purchase process.
- 4. I can save time when I use social networking sites during the purchase process.

### Social Influence - Escobar-Rodríguez, & Carvajal-Trujillo (2013)

- 1. People who are important to me think that I should use social networking sites to make purchases.
- 2. People who influence my behaviour think that I should use social networking sites to make purchases.
- 3. People whose opinions that I value prefer that I use social networking sites to make purchases.
- 4. The brand presence on the social networking sites is important to me when making shopping online.
- 5. The complaints, questions or responses will influence my online purchasing decision.

#### Habit - Escobar-Rodríguez, & Carvajal-Trujillo (2013)

- 1. I will check the comments, reviews, rating, or responses on social networking sites before purchase online has become my habit.
- 2. Social networking sites comments, reviews, rating, or responses are my major reference when purchase online.
- 3. I believe the comments, reviews, rating, or responses on social networking sites are fair.
- 4. I trust the comments, reviews, rating, or responses on social networking sites without thinking.

#### **Online Purchase Intention - Hsin Chang, & Wen Chen (2008)**

- 1. I intend to make a purchase at online store.
- 2. I expect to make a purchase at online store in the future.
- 3. I will probably make a purchase at online store in the near future.

Sources: Origin of constructs.

# **3.6 DATA PROCESSING**

According to Keadle, Shiroma, Freedson, & Lee (2014), data processing decisions can affect the existing sample size of the analysis and summary results. Also, the main purpose of data processing is to improve the quality of the results. The researcher will discuss data processing, including questionnaires, data editing, data encoding, data transcription, and data cleansing.

### **3.6.1 QUESTIONNAIRE CHECKING**

After designing the questionnaire, the researcher need to ensure that the content of the questionnaire does not contain any spelling mistakes, error sequences, misunderstandings, etc. This is to maintain the reliability and effectiveness of the questionnaire. Researcher need to correct the errors that have been clarified and re-run the process again.

#### **3.6.2 DATA EDITING**

At this stage, the researcher identified and extracted responses that were incomplete and missing. All data collected must be consistent in order to provide complete and relevant data.

### 3.6.3 DATA CODING

The researcher used SPSS to analyse the collected data. The software requires numerical data as input. All data must be encoded correctly, and each code represents a specific response. For example, in Section A, the gender of the respondent will be coded as 1 = male and 2 = female.

### 3.6.4 DATA TRANSCRIBING

In this study, the researcher translated the questionnaire into a coding table and analysed the data collected using SPSS. The results are shown in diagram, table with explanation. Using computers to analyse data is very effective and efficient.

### 3.6.5 DATA CLEANING

In this study, the researcher used SPSS to determine the accuracy of the results and acceptable error rates. If any missing responses are found, it will be assigned with missing values. The purpose of running this process is to ensure that researcher receive higher quality data.

# **3.7 DATA ANALYSIS**

The 313 sets of questionnaires with no errors will enter the SPSS for analysis. The results of this analysis will be generated in tables and graphs in response to factors affecting the intention to purchase online.

### 3.7.1 DESCRIPTIVE ANALYSIS

In this study, researcher used descriptive analysis to simplify large amounts of data in the most appropriate way. Descriptive analysis has strengths and weaknesses. However, it determining the best method for the topic depends on the type of product, the research objectives, and the available research time and financial resources (Piper & Scharf, 2004).

According to the study of Mills & Gay (2016), description or summary is the first step in data analysis. However, in some surveys, the entire data analysis process may only include calculations and interpretation of descriptive statistics.

### 3.7.2 INFERENTIAL ANALYSIS

Inferential analysis is used to test the hypothesis of the study (Saunders et al., 2009). In this study, the researcher discussed Pearson's correlation analysis used to validate the hypothesis formulated earlier, while multiple regression analysis will be used to predict the strength value of multiple independent variables to the dependent variable.

### 3.7.2.1 PEARSON'S CORRELATION ANALYSIS

According to Hair (2015), using the Pearson's correlation coefficient to measure the linear correlation between two variables. In this study, it was used to measure the strength of the relationship between the independent variable and the dependent variable based on the study - factors that influence the intention to purchase online.

The Pearson's correlation coefficient, (r) takes values between -1 and +1. The value of r can measure the strength of the correlation between variables. If the plotted bivariate data shows an exact linear relationship with the positive slope, the value shows +1; if the data shows an exact straight line with a negative slope, the value shows -1.



**Figure 3.1:** Examples of Scatter Plots. Adopted from Ramsey, J. B., Newton, H. J., & Harvill, J. L. (2002). The elements of statistics: With applications to economics and the social sciences. Duxbury: Cengage.

#### **3.7.2.2 MULTIPLE REGRESSION ANALYSIS**

According to Suki & Suki (2011), multiple regression is a technique that allows other factors to enter the analysis separately, so each effect can be estimated. In this study, the researcher used the term independent variables to identify variables that would affect the dependent variable (online purchase intention).

The following is the equation of the multiple regression used to validate the strength value of each independent variables.

 $Y=a + b1X1 + b2X2 + \dots + bkXk$ When a = Alpha

b = Beta

- X = Independent variables
- Y = Dependent variable

# **CHAPTER 4**

# DATA ANALYSIS

In Chapter 3, the researcher analysed the collected data. SPSS is used to analyse the survey data. There are few methods for testing data in the demographic section, and a brief description is given under each measurement items. In addition, this chapter will use pie charts and bar charts to describe the data so that the reader has a clear understanding of the results.

### **4.1 DESCRIPTION ANALYSIS**

The researcher distributed a total of 300 sets of questionnaires through online and paperbased surveys. From the 300 sets of questionnaires collected by the researcher, there were 10 sets unanswered, and 17 sets were not fully answered and answered incorrectly. The researcher found that the questionnaires that did not returned in full were from paper survey, mainly because the respondents were in a hurry. Therefore, only 273 of the 300 sets of questionnaires are available for testing.

#### 4.1.1 RESPONDENT DEMOGRAPHIC PROFILE

Refer to the questionnaire in appendix A, the Section A collect the respondents' demographics data, which consist of a total of 14 questions. The questions include gender,

age group, ethnic origin, educational qualification, marital status, employment status, monthly household income, number of visits to online shopping sites, number of times to purchase products or services online, most frequently used online shopping website, most commonly used device for online shopping, type of product or service that is usually purchased online, online shopping experience, and biggest concerns about online shopping.

### 4.1.1.1 GENDER

		Frequency	Percent
Valid	Male	132	48.4
	Female	141	51.6
	Total	273	100.0

 Table 4.1: Gender.





### Figure 4.1: Gender.

Refer to the *Table 4.1* and *Figure 4.1*, it illustrated the percentage of the gender different in sampling. In this survey, male respondents accounted for 48.4% or 132 respondents. Where female respondents were slightly higher than male respondents, which is 51.6% or 141 respondents.

### 4.1.1.2 AGE GROUPS

		Frequency	Percent
Valid	Below 20	27	9.9
	21 - 25	77	28.2
	26 - 30	49	17.9
	31 - 35	86	31.5
	36 - 40	34	12.5
	Total	273	100.0

 Table 4.2: Age groups.



Figure 4.2: Age groups.

The researcher divided the respondents into five different age groups, Below 20, 21 to 25, 26 to 30, 31 to 35 and 36 to 40. The age group of 31 to 35 years old has the highest proportion, accounting for 31.5% or 86 respondents. The second highest age group was 21 to 25 years old, accounting for 28.2% or 77 respondents. Then was followed by the 26 to 30 age group, 17.9% or 49 respondents, and the 36-40 age group, 12.5% or 34 respondents. The lowest proportion of age groups was below 20 years old, accounting for 9.9% or 27 respondents.

### 4.1.1.3 ETHNIC ORIGIN

		Frequency	Percent
Valid	Malay	49	17.9
	Chinese	163	59.7
	Indian	58	21.2
	Others	3	1.1
	Total	273	100.0

 Table 4.3: Ethnic origin.



Figure 4.3: Ethnic origin.

From the demographic result, *Figure 4.3* explained the ethnic group comprises 273 respondents. Among the respondents, majority of them were Chinese, 59.7% or 163 respondents. Then there were Indian, 21.2% or 58 respondents. Also, Malay who differed by 9 respondents, 49 respondents or 17.9%. Others include Punjabi and Orang Ulu, 1.1% or 3 respondents.

## 4.1.1.4 EDUCATIONAL QUALIFICATIONS

		Frequency	Percent
Valid	Foundation	39	14.3
	Bachelor's Degree	153	56.0
	Postgraduate Study	75	27.5
	Others	6	2.2
	Total	273	100.0

**Table 4.4:** Educational qualifications.



Figure 4.4: Educational qualifications.

*Table 4.4* and *Figure 4.4* show the educational qualifications of 273 respondents. The largest number of respondents were bachelor's degrees, accounting for 153 respondents or 56%. Then there were respondents who pursued postgraduate studies, 75 respondents or 27.5%. The number of respondents with foundation qualification were 39 or 14.3%. Lastly, the other 6 respondents or 2.2% were professionals, and qualified for STPM and SPM.

## 4.1.1.5 MARITAL STATUS

		Frequency	Percent
Valid	Single	180	65.9
	Married	84	30.8
	Divorced	9	3.3
	Total	273	100.0

Table 4.5: Marital status.



Figure 4.5: Marital status.

According to *Figure 4.5*, there were 273 of respondents responded to the survey, where 180 respondents were singles equal to 65.9%, followed by 84 respondents who were married equal to 30.8%, and the remaining 9 respondents or 3.3% were divorced.

### 4.1.1.6 EMPLOYMENT STATUS

		Frequency	Percent
Valid	Unemployment	23	8.4
	Self-employed	52	19.0
	Employed for wages	117	42.9
	Student	81	29.7
	Total	273	100.0

 Table 4.6: Employment status.



Figure 4.6: Employment status.

A total of 273 respondents, 117 respondents were employed wages, 42.9%. The second largest number of respondents were students, 81 respondents or 29.7%. Then, the least occupied were self-employed and unemployed respondents, 52 respondents or 19%, and 23 respondents or 8.4%.

### 4.1.1.7 MONTHLY HOUSEHOLD INCOME

		Frequency	Percent
Valid	RM3000 and below	82	30.0
	RM3001 to RM6000	48	17.6
	RM6001 to RM9000	47	17.2
	RM9001 to RM12000	67	24.5
	RM12001 and above	29	10.6
	Total	273	100.0

 Table 4.7: Monthly household income.



Figure 4.7: Monthly household income.

Monthly household income data is listed in *Table 4.7* and summarised in *Figure 4.7* above. From the data collected, most of the respondents' month household income are at the range below RM3000, consist of a total number of 82 respondents or 30%. Then the second highest monthly household income level was RM9001 to RM12000, with a total of 67 respondents or 24.5%. The monthly household income level of RM3001 to RM6000 and RM6001 to RM9000 is very close, with 48 respondents or 17.6%, and 47 respondents or 17.2%. Respondents with monthly household income levels of RM12001 and above were the best, with only 29 respondents or 10.6%.

### 4.1.1.8 NUMBER OF VISITS TO ONLINE SHOPPING SITES

		Frequency	Percent
Valid	Less than once per week	19	7.0
	1 - 2 times per week	104	38.1
	3 - 4 times per week	72	26.4
	5 - 6 times per week	51	18.7
	Everyday	27	9.9
	Total	273	100.0

**Table 4.8:** Number of visits to online shopping sites.



Figure 4.8: Number of visits to online shopping sites.

Refer to the *Table 4.8*, it shows frequency of respondents visit or perform an online search and its correspondent population. The highest number of visits to online sites was 1 to 2 times a week, with 104 respondents or 38.1%. Then 72 out of 273 respondents or 26.4% visited the online site 3 to 4 times a week, and 51 respondents or 18.7% visited the online website 5 to 6 times in a week. The percentage of respondents who visit online sites every day (27 respondents or 9.9%) and who rarely visit online sites (19 respondents or 7%) did not exceed 20% of the total.

### 4.1.1.9 NUMBER OF TIMES TO PURCHASE ONLINE

		Frequency	Percent
Valid	Less than once per month	81	29.7
	1 - 3 times per month	93	34.1
	4 - 6 times per month	42	15.4
	7 - 9 times per month	47	17.2
	10 or more times per month	10	3.7
	Total	273	100.0

**Table 4.9:** Number of times to purchase online.



Figure 4.9: Number of times to purchase online.

*Table 4.9* shows the frequency of purchase a respondent would purchase a product or service online. Most respondents will purchase products or services online 1 or 3 times a month, 98 respondents or 34.1%. However, some respondents did not purchase any products or services online within a month, with 81 respondents or 29.7%. Then, 47 respondents or 17.2% will purchase online 7 to 9 times in a month; 42 respondents or 15% will purchase online 4 - 6 times in a month. Lastly, there are very few respondents who purchase online 10 or more times in a month, only 10 respondents or 3.7%.

## 4.1.1.10 MOST FREQUENTLY USED ONLINE SHOPPING SITE

		Frequency	Percent
Valid	Taobao	88	32.2
	Lazada	89	32.6
	11street	30	11.0
	Shopee	41	15.0
	Others	25	9.2
	Total	273	100.0

**Table 4.10:** Most frequently used online shopping site.



# **MOST FREQUENTLY USED ONLINE SHOPPING SITE**

Figure 4.10: Most frequently used online shopping site.

The online shopping sites that most commonly used by respondents were Lazada and Taobao, with a total of 89 respondents or 32.6%, and 88 respondents with 32.2%. Followed by Shopee, with 41 respondents or 15%. There is also 11street, 30 respondents or 11%. In addition, 25 respondents (9.2%) chose "others" and provided online shopping sites they used frequently, including a2a Global Network, AirAsia, Amazon, Carousell, eBay, ezbuy, Facebook, Hermo, Kinokuniya, Malaysia Airlines, Tesco and Zalora.

## 4.1.1.11 MOST COMMONLY USED DEVICE FOR ONLINE SHOPPING

		Frequency	Percent
Valid	Smartphone	125	45.8
	Tablet	60	22.0
	Desktop/ Laptop	88	32.2
	Total	273	100.0

**Table 4.11:** Most commonly used device for online shopping.





Figure 4.11: Most commonly used device for online shopping.

Researcher divide online shopping devices into three categories, smartphone, tablet and desktop/ laptop. In this survey, most of the respondents indicated that smartphones are the most commonly used devices for online shopping, with a total of 125 respondents or 45.8%. Then, 88 respondents (32.2%) chose desktop/ laptop as the most common used shopping device. The remaining 60 respondents or 22%, their most common used online shopping devices are tablets.

#### 4.1.1.12 MOST FREQUENTLY PURCHASED PRODUCT OR SERVICE ONLINE

		Frequency	Percent
Valid	Fashion-related products	119	15.2
	Books/ Music/ Stationary	100	12.7
	IT & Mobile	100	12.7
	Beauty and health care	87	11.1
	Travel products and services	103	13.1
	Game-related products	61	7.8
	Sport equipment	65	8.3
	Furniture and homeware	79	10.1
	Food ordering	70	8.9
	Others	1	0.1
	Total	785	100.0

**Table 4.12:** Most frequently purchased product or service online.





Figure 4.12: Most frequently purchased product or service online.

*Table 4.12* shown the most frequently purchased products and services online by respondents, fashion related products (15.2%), travel products and services (13.1%), books/music/stationery (12.7%), IT and mobile (12.7%) ), beauty and health care (11.1%),
furniture and homeware (10.1%), food ordering (8.9%), sports equipment (8.3%), game related products (7.8%) and others (0.1%). The respondent who chose "other" said that the product he/ she would purchase online was a pet-related product.

### 4.1.1.13 BAD ONLINE SHOPPING EXPERIENCE

		Frequency	Percent
Valid	Yes	146	53.5
	No	127	46.5
	Total	273	100.0

**Table 4.13:** Bad online shopping experience. Developed for this research.



# **BAD ONLINE SHOPPING EXPERIENCE**

### Figure 4.13: Bad online shopping experience.

*Figure 4.13* illustrated the percentage of respondents who have a bad experience with online shopping. In this survey, respondents answered 53.5% or 1146 respondents. The respondents who did not respond were slightly lower, i.e. 46.5% or 127 respondents.

## 4.1.1.14 ONLINE SHOPPING CONCERNS

		Percent
Valid	System Quality	15.3
	Service Quality	15.9
	Information Quality	15.6
	Trust	16.8
	Performance Expectation	13.5
	Social Influence	11.9
	Habit	11.0
	Total	100

**Table 4.14:** Online shopping concerns.



# ONLINE SHOPPING CONCERNS

Figure 4.14: Online shopping concerns.

*Figure 4.14* shows the factors that are the first consideration in online shopping in reverse order. According to 273 respondents, the first factor to consider when shopping online is trust (16.8%). This is followed by service quality (15.9%), information quality (15.6%), system quality (15.3%), performance expectation (13.5) and social influence (11.9%). And among all the choices, the least priority is habit (11%).

### 4.2 INFERENTIAL ANALYSES

### 4.2.1 PEARSON CORRELATION ANALYSIS

Coefficient Range	Strength of Association
0.91 - 1.00 / -1.00 ~ -0.91	Very Strong
0.71 - 0.90 / -0.90 ~ -0.71	High
0.41 - 0.70 / -0.70 ~ -0.41	Moderate
0.21 - 0.40 / -0.40 ~ -0.21	Small but define relationship

**Table 4.15:** Rule of thumb of Pearson correlation analysis. Adopted from Hair, J. F. (2015).Essentials of Business Research Methods, ME Sharpe.

		Corre	elations			
		TRS	PEX	SIN	HBT	OPI
TRS	Pearson Correlation	1	.514**	.487**	.580**	.502**
	Sig. (2-tailed)		.000	.000	.000	.000
	Ν	273	273	273	273	273
PEX	Pearson Correlation	.514**	1	.690**	.630**	.672**
	Sig. (2-tailed)	.000		.000	.000	.000
	Ν	273	273	273	273	273
SIN	Pearson Correlation	.487**	.690**	1	.694**	.598**
	Sig. (2-tailed)	.000	.000		.000	.000
	Ν	273	273	273	273	273
HBT	Pearson Correlation	.580**	.630**	.694**	1	.670**
	Sig. (2-tailed)	.000	.000	.000		.000
	Ν	273	273	273	273	273
OPI	Pearson Correlation	.502**	.672**	.598**	.670**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	Ν	273	273	273	273	273
**. Co	prrelation is significant at	the 0.01 le	vel (2-taile	ed).		

 Table 4.16: Pearson correlation analysis.

By referring to *table 4.15* and *4.16*, the correlation matrix indicates that all variables are positively correlated and significantly correlated with another variable. All the four variables in the range of 0.41-0.70 with a medium relationship, and. all variable correlation coefficients are less than 0.9. Therefore, there is no multicollinearity in these data.

The higher the correlation coefficient, the higher the accuracy and the stronger the relationship with the relevant variables. Tables above shown the correlation between variables and online purchase intention are moderate relationship. Positive and medium relationships included performance expectancy (r = 0.672), habit (r = 0.670), social influence (r = 0.598), and eTrust (r = 0.502). This also means that performance expectancy, habit, social influence, and eTrust are significantly related to the intention to purchase online.

#### 4.2.2 MULTIPLE REGRESSION ANALYSIS

In this study, all the variables will be evaluated using multiple regression analysis. Refer to the proposed research framework, eTrust is the mediator to identify its strength to the intention to online shopping. H1, H2 and H3 are the hypotheses formulated to test how system quality, information quality and service quality would affect the strength to eTrust. H4, H5, H6, and H7 are another set of hypotheses wish to test the strength of the independent variable, i.e. eTrust, performance expectancy, social influence and habit would influence the online purchase Intention. The following sections describe the result achieved from each the hypothesis test.

#### 4.2.2.1 PART I – INDEPENDENT VARIABLES TO MEDIATOR

Model Summary <sup>b</sup>									
Model	R	R Square	Adjusted R Square						
1	.818 <sup>a</sup>	.670	.666						
a. Predictors: (Const	a. Predictors: (Constant), information quality, system quality, service quality								
b. Dependent Variab	le: eTrust								

 Table 4.17: Model summary (IVs to mediator).

Multiple correlation coefficients using all predictors simultaneously were 0.818 (R2 = 0.670). An adjusted R<sup>2</sup> of 0.666 means that 66.6% of the variation in eTrust can be explained by information quality, system quality, service quality.

	ANOVA <sup>a</sup>										
Mo	del	Sum of Squares	df	Mean Square	F	Sig.					
1	Regression	85.176	3	28.392	181.737	.000 <sup>b</sup>					
	Residual	42.025	269	.156							
	Total	127.201	272								
a. D	a. Dependent Variable: eTrust										
b. P	b. Predictors: (Constant), information quality, system quality, service quality										

 Table 4.18: ANOVA (IVs to mediator).

The ANOVA (*table 4.18*) checks whether the overall regression model is suitable for the data. A multiple regression model with two predictors yielded F(3, 269) = 181.737 and the p-value was significant. This suggests that the combination of predictors significantly predicts eTrust.

	Coefficients <sup>a</sup>							
	Unstar	dardized	Standardized			95.	0%	
	Coef	ficients	Coefficients			Confi	dence	
						Interva	l for B	
	В	Std.	Beta			Lower	Upper	
Model		Error		t	Sig.	Bound	Bound	
1 (Constant)	.495	.162		3.058	.002	.176	.814	
System quality	.139	.057	.136	2.429	.016	.026	.252	
Service quality	.346	.060	.343	5.737	.000	.227	.464	
Information quality	.399	.056	.412	7.174	.000	.289	.508	
a. Dependent Vari	able: eT	rust				•	•	

 Table 4.19: Coefficients (IVs to mediator).

Refer to *Table 4.19*, the p-value of independent variables i.e. system quality, service quality and information quality were less than 0.05, therefore it rejected the null hypotheses and accept alternative hypotheses.

#### 4.2.2.2 PART II – INDEPENDENT VARIABLES TO DEPENDENT VARIABLE

Model Summary <sup>b</sup>								
Model	R	R Square	Adjusted R Square					
1	.747 <sup>a</sup>	.559	.552					
a. Predictors: (Const	a. Predictors: (Constant), eTrust, performance expectancy, social influence, habit							
b. Dependent Variable: online purchase intention								

 Table 4.20: Model summary (IVs to DV).

Multiple correlation coefficients using all predictors simultaneously were 0.747 (R2 = 0.559). An adjusted  $R^2$  of 0.552 means that 55.2% of the variation in online purchase intention can be explained by eTrust, performance expectancy, social influence and habit.

	ANOVA <sup>a</sup>										
Mo	del	Sum of Squares	df	Mean Square	F	Sig.					
1	Regression	104.841	4	26.210	84.779	.000 <sup>b</sup>					
	Residual	82.856	268	.309							
	Total	187.697	272								
a. D	a. Dependent Variable: online purchase intention										
b. P	b. Predictors: (Constant), eTrust, performance expectancy, social influence, habit										

**Table 4.21:** ANOVA (IVs to DV).

The *Table 4.21*, ANOVA checks the overall regression model whether it is suitable for the data. A multiple regression model with two predictors yielded F (4, 268) = 84.779 and the p-value was significant. This suggests that the combination of predictors significantly predicts online purchase intention.

	Coefficients <sup>a</sup>							
		Unstan	dardized	Standardized	95		95.	0%
		Coef	ficients	Coefficients			Confi	dence
							Interva	l for B
		В	Std.	Beta			Lower	Upper
Mo	odel		Error		t	Sig.	Bound	Bound
1	(Constant)	.501	.223		2.242	.026	.061	.940
	eTrust	.098	.062	.081	1.572	.117	025	.221
	Performance expectancy	.394	.064	.368	6.161	.000	.268	.520
	Social influence	.066	.065	.065	1.023	.307	061	.194
	Habit	.353	.064	.346	5.552	.000	.228	.478
a. 1	Dependent Varia	ble: onli	ine purcha	se intention	•		•	•

 Table 4.22: Coefficients (IVs to DV).

Refer to *Table 4.22*, the p-value of performance expectancy and habit is less than  $\alpha$  0.05, therefore reject null hypotheses. However, the p-value of eTrust and social influence is more than  $\alpha$  0.05, therefore do not reject null hypotheses.

### 4.2.3 SOBEL TEST

Coefficients <sup>a</sup>									
	Unstar	ndardized	Standardized			95.	0%		
	Coefficients		Coefficients			Confidence			
					Interva	l for B			
	В	Std.	Beta			Lower	Upper		
Model		Error		t	Sig.	Bound	Bound		
1 (Constant)	1.67	.28		6.03	.000	1.13	2.22		
System quality	.59	.07	.47	8.86	.000	.46	.72		
a. Dependent Var	riable: or	nline purch	ase intention						

# 4.2.3.1 TEST 1 – SYSTEM QUALITY

 Table 4.23: Coefficients (system quality to online purchase intention).

Coefficients <sup>a</sup>									
	Unstar	ndardized	Standardized			95.	0%		
	Coefficients		Coefficients			Confidence			
						Interva	l for B		
	В	Std.	Beta			Lower	Upper		
Model		Error		t	Sig.	Bound	Bound		
1 (Constant)	1.28	.19		6.77	.000	.90	1.65		
System quality	.70	.05	.69	15.53	.000	.61	.79		
a. Dependent Va	a. Dependent Variable: eTrust								

 Table 4.24: Coefficients (system quality to eTrust).

Coefficients <sup>a</sup>							
	Unstar	ndardized	Standardized			95.	0%
	Coef	ficients	Coefficients			Confi	dence
						Interva	l for B
	В	Std.	Beta			Lower	Upper
Model		Error		t	Sig.	Bound	Bound
1 (Constant)	1.15	.29		4.00	.000	.58	1.72
System quality	.30	.09	.24	3.45	.001	.13	.48
eTrust	.41	.09	.33	4.73	.000	.24	.58
a. Dependent Variable: online purchase intention							

**Table 4.25:** Coefficients (system quality and eTrust to online purchase intention).

Refer to *Table 4.23*, the unstandardized coefficient is 0.59 with a standard error 0.07. Follow by *Table 4.24*, the unstandardized coefficient is 0.70, with a standard error 0.05; *Table 4.25*, the unstandardized coefficient is 0.41, with a standard error 0.09. Whereby, the result of Sobel test statistic is 4.33 with a p-value 0.00.

# 4.2.3.2 TEST 2 – SERVICE QUALITY

Coefficients <sup>a</sup>							
	Unstar	ndardized	Standardized			95.	0%
	Coef	ficients	Coefficients			Confi	dence
						Interva	l for B
	В	Std.	Beta			Lower	Upper
Model		Error		t	Sig.	Bound	Bound
1 (Constant)	1.88	.28		6.67	.000	1.32	2.43
Service quality	.53	.07	.44	7.98	.000	.40	.67
a. Dependent Variable: online purchase intention							

**Table 4.26:** Coefficients (service quality to online purchase intention).

Coefficients <sup>a</sup>							
	Unstandardized		Standardized			95.	0%
	Coef	ficients	Coefficients			Confi	dence
					Interva	l for B	
	В	Std.	Beta			Lower	Upper
Model		Error		t	Sig.	Bound	Bound
1 (Constant)	1.00	.17		5.94	.000	.67	1.33
Service quality	.76	.04	.76	19.02	.000	.68	.84
a. Dependent Variable: eTrust							

 Table 4.27: Coefficients (service quality to eTrust).

Coefficients <sup>a</sup>							
	Unstar	ndardized	Standardized		95.0%		0%
	Coef	ficients	Coefficients			Confi	dence
						Interva	l for B
	В	Std.	Beta			Lower	Upper
Model		Error		t	Sig.	Bound	Bound
1 (Constant)	1.39	.29		4.85	.000	.82	1.95
Service quality	.16	.10	.13	1.64	.101	03	.35
eTrust	.49	.10	.40	5.03	.000	.30	.68
a. Dependent Variable: online purchase intention							

 Table 4.28: Coefficients (service quality and eTrust to online purchase intention).

Refer to *Table 4.26*, the unstandardized coefficient is 0.53 with a standard error 0.07. Follow by *Table 4.27*, the unstandardized coefficient is 0.76, with a standard error 0.04; *Table 4.28*, the unstandardized coefficient is 0.49, with a standard error 0.10. Whereby, the result of Sobel test statistic is 4.74 with a p-value 0.00.

## 4.2.3.3 TEST 3 – INFORMATION QUALITY

Coefficients <sup>a</sup>							
	Unstar	dardized	Standardized			95.	0%
	Coef	ficients	Coefficients			Confi	dence
						Interva	l for B
	В	Std.	Beta			Lower	Upper
Model		Error		t	Sig.	Bound	Bound
1 (Constant)	1.75	.26		6.60	.000	1.23	2.27
Information quality	.56	.06	.48	8.96	.000	.44	.68
a Dependent Variable: online purchase intention							

a. Dependent Variable: online purchase intention**Table 4.29:** Coefficients (information quality to online purchase intention).

Coefficients <sup>a</sup>							
	Unstar	ndardized	Standardized			95.	0%
	Coef	ficients	Coefficients			Confi	dence
						Interva	l for B
	В	Std.	Beta			Lower	Upper
Model		Error		t	Sig.	Bound	Bound
1 (Constant)	1.06	.16		6.67	.000	.75	1.37
Information quality	.74	.04	.77	19.82	.000	.67	.82
a. Dependent Variable: online purchase intention							

 Table 4.30: Coefficients (information quality to eTrust).

Coefficients <sup>a</sup>							
	Unstandardized		Standardized			95.	0%
	Coef	ficients	Coefficients			Confi	dence
						Interva	l for B
	В	Std.	Beta			Lower	Upper
Model		Error		t	Sig.	Bound	Bound
1 (Constant)	1.23	.28		4.77	.000	.78	1.87
Information quality	.26	.10	.22	2.77	.006	.08	.45
eTrust	.40	.10	.33	4.05	.000	.21	.59
a. Dependent Variable: online purchase intention							

Table 4.31: Coefficients (information quality and eTrust to online purchase intention).

Refer to *Table 4.29*, the unstandardized coefficient is 0.56 with a standard error 0.06. Follow by *Table 4.30*, the unstandardized coefficient is 0.74, with a standard error 0.04; *Table 4.31*, the unstandardized coefficient is 0.40, with a standard error 0.10. Whereby, the result of Sobel test statistic is 3.91 with a p-value 0.00.

### 4.2.4 HYPOTHESES TESTING

Hypothesis 1

H1<sub>0</sub>: System quality has no significant positive influence on eTrust.

H1<sub>A</sub>: System quality has a significant positive influence on eTrust.

Based on *Table 4.19*, the p-value of the test for system quality is 0. 016, which is lower than 0.05. Hence, reject H1<sub>0</sub> and accept H1<sub>A</sub>. Additionally, the p-value of Sobel test statistic is less than  $\alpha$  level 0.05, therefore there is an evidence of mediation in this model. In conclusion, system quality has a significant positive influence on eTrust.

### Hypothesis 2

H2<sub>0</sub>: Service quality has no significant positive influence on eTrust.

H2<sub>A</sub>: Service quality has a significant positive influence on eTrust.

Refer to the test result in *Table 4.19*, the p-value for service quality is 0.000, which is lower than 0.05. Hence, reject H2<sub>0</sub> and accept H2<sub>A</sub>. Additionally, the p-value of Sobel test statistic is less than  $\alpha$  level 0.05, therefore there is an evidence of mediation in this model. In conclusion, service quality has a significant positive influence on eTrust.

# Hypothesis 3

H3<sub>0</sub>: Information quality has no significant positive influence on eTrust. H3<sub>A</sub>: Information quality has a significant positive influence on eTrust.

Based on *Table 4.19*, the p-value of the test for information quality is 0.000, which is lower than 0.05. Hence, reject H3<sub>0</sub> and accept H3<sub>A</sub>. Besides, the p-value of Sobel test statistic is less than  $\alpha$  level 0.05, therefore there is an evidence of mediation in this model. In conclusion, information quality has a significant positive influence on eTrust.

## Hypothesis 4

H4<sub>0</sub>: eTrust has no significant positive influence on online purchase intention. H4<sub>A</sub>: eTrust has a significant positive influence on online purchase intention.

Refer to the test result in *Table 4.22*, the p-value for eTrust is 0.117, which is higher than 0.05. Hence, do not reject H4<sub>0</sub>. Besides, the p-value of Sobel test statistic is less than  $\alpha$  level 0.05, therefore there is an evidence of mediation in this model. In conclusion, eTrust has no significant positive influence on online purchase intention.

# Hypothesis 5

H5<sub>0</sub>: Performance expectancy has no significant positive influence on online purchase intention.

H5<sub>A</sub>: Performance expectancy has a significant positive influence on online purchase intention.

Refer to the test result in *Table 4.22*, the p-value of the test for performance expectancy is 0.000, which is lower than 0.05. Hence, reject H5<sub>0</sub> and accept H5<sub>A</sub>. Moreover, the p-value of Sobel test statistic is less than  $\alpha$  level 0.05, therefore there is an evidence of mediation in this model. In conclusion, performance expectancy has a significant positive influence on online purchase intention.

### Hypothesis 6

H6<sub>0</sub>: Social influence has no significant positive influence on online purchase intention. H6<sub>A</sub>: Social influence has a significant positive influence on online purchase intention.

Based on *Table 4.22*, the p-value of the test for social influence is 0.307, which is higher than 0.05. Hence, do not reject H6<sub>0</sub>. Morover, the p-value of Sobel test statistic is less than  $\alpha$  level 0.05, therefore there is an evidence of mediation in this model. In conclusion, social influence has a significant positive influence on online purchase intention.

## Hypothesis 7

H7<sub>0</sub>: Habit has no significant positive influence on online purchase intention. H7<sub>A</sub>: Habit has a significant positive influence on online purchase intention.

Based on *Table 4.22*, the p-value of the test for habit is 0.000, which is lower than 0.05. Hence, reject H7<sub>0</sub> and accept H7<sub>A</sub>. Furthermore, the p-value of Sobel test statistic is less than  $\alpha$  level 0.05, therefore there is an evidence of mediation in this model. In conclusion, habit has a significant positive influence on online purchase intention.

# **CHAPTER 5**

# **DISCUSSION AND CONCLUSIONS**

This chapter focuses on the results achieved from the statistical test and some assumptions made. Other than that, it detail discuss the findings, its' implications and limitations of the study, and recommendations for future research, as well as the conclusions.

# **5.1 SUMMARY OF STATISTICAL ANALYSES**

A summary of description analyses, and inferential analyses will be discussed in this section.

### 5.1.1 DESCRIPTION ANALYSES

Respondent Demographic Profile							
1. Gender:	Gender:						
• Male (48.4%)	• Male (48.4%)						
• Female ( <i>51.6%</i> )							
2. Age:							
• Below 20 ( <b>9.9%</b> )	• 31 – 35 ( <b>31.5</b> %)						
• 21 – 25 ( <b>28.2</b> %)	• 36 - 40 ( <b>12.5%</b> )						
• 26-30 ( <b>17.9%</b> )							

3.	Ethnicity origin (or Race):	
	• Malay (17.9%)	• Others (1.1%): Punjabi and
	• Chinese (59.7%)	Orang Ulu.
	• Indian (21.2%)	
4.	Educational qualification:	
	• Foundation (14.3%)	• Others (2.2%): Professional,
	• Bachelor's degree ( <i>56.0%</i> )	STPM and SPM.
	• Postgraduate studies (27.5%)	
5.	Marital status:	
	• Single (65.9%)	
	• Married (30.8%)	
	• Divorced (3.3%)	
6.	Employment status:	
	• Unemployment (8.4%)	• Employed for wages (42.9%)
	• Self-employed ( <b>19.0%</b> )	• Student (29.7%)
7.	Monthly household income:	
	• RM3000 and below (30.0%)	• RM9001 to RM12000 (24.5%)
	• RM3001 to RM6000 (17.6%)	• RM12001 and above (10.6%)
	• RM6001 to RM9000 (17.2%)	
8.	Number of visits to online shopping sites:	
	• Less than once per week (7.0%)	• 5 – 6 days per week (18.7%)
	• 1 – 2 days per week (38.1%)	• Everyday ( <b>9.9%</b> )
	• 3 – 4 days per week (26.4%)	
9.	Number of times to purchase online:	
	• Less than once per month (29.7%)	• 7 – 9 times per month (17.2%)
	• 1 – 3 times per month (34.1%)	• 10 or more times per month
	• 4 – 6 times per month (15.4%)	(3.7%)

10. Most frequently used online shopping site:	
• Taobao (32.2%)	• Others $(9.2\%)$ : a2a Global
• Lozodo (32.6%)	Network AirAsia Amazon
• Lazada (32.070)	Corousell a Pay, a chuy
• 11street (11.0%)	Carousen, eBay, ezbuy,
• Shopee (15.0%)	Facebook, Hermo, Kinokumya,
	Malaysia Airlines, Tesco and
	Zalora.
11. Most commonly used device for online shop	oping:
• Smartphone ( <b>45.8</b> %)	
• Tablet (22.0%)	
• Desktop/ Laptop (32.2%)	
12. Most frequently purchased product or servic	e online:
• Fashion-related products (15.2%)	• Sport equipment (8.3%)
Books/ Music/ Stationary (12.7%)	• Furniture and homeware (10.1%)
• IT & Mobile (12.7%)	• Food ordering ( <b>8.9%</b> )
• Beauty and health care (11.1%)	• Others (0.1%): Pet-related
• Travel products and services (13.1%)	product
• Game-related products (7.8%)	
13. Bad online shopping experience:	
• Yes (53.5%)	
• No (46.5%)	
14. Online shopping concerns (ranking):	
1) Trust ( <b>16.8%</b> )	
2) Service Quality (15.9%)	
3) Information Quality (15.6%)	
4) System Quality (15.3%)	
5) Performance Expectation (13.5%)	
6) Social Influence (11.9%)	
7) Habit ( <b>11.0%</b> )	
<b>Table 5.1:</b> Summary of description analyses.	



### 5.1.2 INFERENTIAL ANALYSES

In this section, the researcher will outline the inferential analyses, including Pearson correlation analysis result and the strength of each variable in the multiple regression analysis test.

### 5.1.2.1 PEARSON CORRELATION ANALYSIS

Variables	Correlation Coefficient	P-value				
TRS → OPI	0.502	0.000				
PEX → OPI	0.672	0.000				
SIN → OPI	0.598	0.000				
HBT → OPI	0.670	0.000				
Dependent variable: online purchase intention (OPI)						
Independent variables: eTrust (TRS), performance expectancy (PEX), social influence						
(SIN), and habit (HBT)						

**Table 5.2:** Summary of Pearson correlation analysis.

The *Table 5.2* shown all the correlation coefficient values were felled at the range of 0.41 to 0.70, with a significant value of 0.000. Means, there is significant and moderate relationship between independent variables and dependent variable.

### 5.1.2.2 MULTIPLE REGRESSION ANALYSIS

Based on the results of multiple regression analysis (part II), the  $R^2$  value was 0.747 means 74.7% of the variation in online purchase intention can be explained by eTrust, performance expectancy, social influence and habit. Besides, the F-value in the ANOVA Table was 80.779, with a significant value of 0.000, this shown a significant difference between the dependent variable and independent variables. As a results, the proposed hypotheses were accepted.

The multiple regression equation has shown as below:

 $\hat{Y} = 0.501 + 0.098 \text{ (TRS)} + 0.394 \text{ (PEX)} + 0.066 \text{ (SIN)} + 0.353 \text{ (HBT)}$ 

 $\hat{Y}$  = Online purchase intention TRS = eTrust PEX = Performance expectancy SIN = Social Influence HBT = Habit

Path	β value	P-value						
TEST 1								
STQ → OPI	0.47	0.000						
$STQ \rightarrow TRS$	0.69	0.000						
$STQ + TRS \rightarrow OPI$	0.33	0.000						
TEST 2								
SVQ → OPI	0.44	0.000						
$SVQ \rightarrow TRS$	0.76	0.000						
$SVQ + TRS \rightarrow OPI$	0.40	0.000						
	TEST 3							
IFQ → OPI	0.48	0.000						
IFQ → TRS	0.77	0.000						
$IFQ + TRS \rightarrow OPI$	0.33	0.000						
Dependent variable: online purchase intention (OPI)								

## 5.1.2.3 SOBEL TEST

Mediator: eTrust (TRS)

Independent Variables: system quality (STQ), service quality (SVQ), and information quality (IFQ)

 Table 5.3: Summary of Sobel test statistic.

The *Table 5.3* shown all the p-values were at significant value of 0.000. Means, there meet the mediator condition.

# **5.2 MAJOR FINDINGS**

7 proposed hypotheses had been tested in this research project. And the results are clearly stated in *Table 5.4*.

Hypotheses	Results	Supported/
		Not Supported
H1: System quality has a significant positive influence	P = 0.016	Supported
on eTrust.		
H2: Service quality has a significant positive influence	P = 0.000	Supported
on eTrust.		
H3: Information quality has a significant positive	P = 0.000	Supported
influence on eTrust.		
H4: eTrust has a significant positive influence on online	P = 0.117	Not supported
purchase intention.		
H5: Performance expectancy has a significant positive	P = 0.000	Supported
influence on online purchase intention.		
H6: Social influence has a significant positive influence	P = 0.037	Not supported
on online purchase intention.		
H7: Habit has a significant positive influence on online	P = 0.000	Supported
purchase intention.		

**Table 5.4:** Summary of hypotheses testing Developed for the research

### Hypothesis 1

H1<sub>0</sub>: System quality has no significant positive influence on eTrust.

H1<sub>A</sub>: System quality has a significant positive influence on eTrust.

Based on *Table 5.3*, the p-value of the test for system quality is 0. 016, which is lower than 0.05. Hence, reject  $H1_0$  and accept  $H1_A$ .

System quality has a positive impact on the use of online shopping sites and the intention of consumers to purchase online, but its impact is smaller than social support (emotional support and informational support), which had tested in an e-commerce study by Liang et al. in 2011. Besides, Kim, Jin, and Swinney (2009) also emphasized system quality not only a strong predictor for eTrust, but also eSatisfaction.

#### Hypothesis 2

H2<sub>0</sub>: Service quality has no significant positive influence on eTrust. H2<sub>A</sub>: Service quality has a significant positive influence on eTrust.

Based on *Table 5.3*, the p-value of the test for service quality is 0.000, which is lower than 0.05. Hence, reject H2<sub>0</sub> and accept H2<sub>A</sub>.

Service quality has proven to be a key factor in achieving good results in e-commerce (Zeithaml, Parasuraman, & Malhotra, 2002). Consumers are most concerned about online personal privacy in the online context. If merchants can improve their service quality (e.g. security services), the reliability and trust of consumers in e-commerce will also increase (Zhou, 2011).

### Hypothesis 3

H3<sub>0</sub>: Information quality has no significant positive influence on eTrust. H3<sub>A</sub>: Information quality has a significant positive influence on eTrust.

Based on *Table 5.3*, the p-value of the test for information quality is 0.000, which is lower than 0.05. Hence, reject  $H3_0$  and accept  $H3_A$ .

The information quality reflects the accuracy, relevance and timeliness of the information (Kim, Xu, & Koh, 2004). In addition, information quality also mark as the trustworthiness of the merchants (Zhou, 2011). If the quality of the information is poor, consumers may feel that merchant's lack of ability and kindness to provide quality goods or services (Zahedi & Song, 2008). This will reduce the consumers trust in e-commerce.

### Hypothesis 4

H4<sub>0</sub>: eTrust has no significant positive influence on online purchase intention. H4<sub>A</sub>: eTrust has a significant positive influence on online purchase intention. Based on *Table 5.3*, the p-value of the test for eTrust is 0.117, which is higher than 0.05. Hence, do not reject  $H4_0$ .

When eTrust and habit are the same as the variables in a study, one of them will have a negative correlation with the dependent variable (Chiu, Hsu, Lai, & Chang, 2012). In other words, stronger habit reduce the impact of eTrust on the intention to purchase online. On the other hand, when the habit is weak, eTrust will dominate the impact on the intention to purchase online. Once the assessment level is reached, eTrust may no longer help to test the online purchase intention (Van der Heijden, Verhagen, & Creemers, 2003). Whereby, one of the possible conditions for eTrust to reach the threshold level is that the consumer believes that there is no or low uncertainty.

#### Hypothesis 5

H5<sub>0</sub>: Performance expectancy has no significant positive influence on online purchase intention.

H5<sub>A</sub>: Performance expectancy has a significant positive influence on online purchase intention.

Based on *Table 5.3*, the p-value of the test for performance expectancy is 0.000, which is lower than 0.05. Hence, reject H5<sub>0</sub> and accept H5<sub>A</sub>.

Online purchase intention depends on the level of performance expectation by consumer in e-commerce (San Martin et al., 2012). Similarly, the higher the individual's performance expectations in IT, the higher the intention to purchase online. Besides, the usefulness of online shopping sites is very important for promoting online shopping, so performance expectations should be considered an important factor in deciding whether intent to purchase products or services through the online shopping site (Guo & Barnes, 2009).

### Hypothesis 6

H6<sub>0</sub>: Social influence has no significant positive influence on online purchase intention. H6<sub>A</sub>: Social influence has a significant positive influence on online purchase intention.

Based on *Table 5.3*, the p-value of the test for social influence is 0.307, which is higher than 0.05. Hence, do not reject  $H6_0$ .

The universalization of the Internet as a source of online shopping can reduce the normative pressures (positive or negative) of the social environment with respect to adopt new technologies in the purchase behaviour (San Martin et al., 2012). Moreover, when consumers purchase products or services online as a means of avoiding punishment or obtaining rewards through others, the impact of social influence on behavioural intent is important; however, voluntary in not compliant behaviour (Guo et al., 2009).

#### Hypothesis 7

 $H7_0$ : Habit has no significant positive influence on online purchase intention.  $H7_A$ : Habit has a significant positive influence on online purchase intention.

Based on *Table 5.3*, the p-value of the test for habit is 0.000, which is lower than 0.05. Hence, reject  $H7_0$  and accept  $H7_A$ .

Khalifa et al. (2007) explained that online shopping habit and online shopping experience have the same ability to predict online purchase intention. When consumers have strong online shopping habit, it may better explains the willingness to shop online. However, if consumers have not yet gained the habit of online shopping, the online shopping experience can provide a better explanation. Moreover, Chiu et al. (2012) suggested online shopping sites can provide greater value to customers, and it will increase customer satisfaction and thus have a positive impact on the development of customer habits.

# **5.3 MANAGERIAL IMPLICATIONS**

This study focuses on website qualities and social activities influence the online purchase intention. Through the overall findings of this study, there are some important implications for merchants, consumers and scholars to keep an eye on the new trends in purchasing products or services, e-commerce.

From a management perspective, it is worth noting that eTrust is based on website qualities. The findings show that website qualities not only have a direct impact on eTrust, but also has an indirect impact on eLoyalty through eTrust (Urban, Sultan, & Qualls, 2000). Meanwhile, customers also realize that online shopping is associated with risks, so eTrust is seen as a key component of e-commerce. Thus, merchants should be aware that to establish eTrust, website qualities must be developed in advance.

Merchants should establish appropriate levels of customer expectations and do their best to meet these expectations in order to increase customer satisfaction with the website quality. Since the expectations of every customers may be different, the better strategy for merchants to identify customer expectations is to segment customers according to their needs and design different marketing plans for each market segment. The researcher suggests that using focus group approach to identify customer expectations for each market segment. In addition, as customers' expectations will be improved and modified based on their previous trading experience, online sellers should continually modify their marketing plans to meet customer needs.

After discussing the importance of website quality, focusing on eTrust is the second important factor in this study. Many studies have shown that, especially for e-commerce, gaining consumer trust is the first step in guiding online purchase intention of customers (Kim, Ferrin, & Rao, 2008; Gefen et al., 2003b). By referring to the research results of Chiu et al. (2012) and the findings of this study, researcher suggests that habit has a significant regulatory effect on the relationship between eTrust and online purchase intention. Consumers may or may not purchase products or services from trusted sellers, but they definitely will not have intent to purchase products or services from untrustworthy sellers.

As Van der Heijden et al. (2003) explained that trust is a threshold variable. This means that trust is still the main factor that stimulates consumers' online purchase intentions, however, once trust reaches a sufficient level, then habit will have a regulatory effect on this relationship. If merchants do not gain the trust of the customers at first, there is no need to incite the habit of the customers. Where gaining consumer trust is largely driven by merchant.

In this study, it is important to discuss about the new trend in e-commerce. Social media brings businesses closer to customers. A better understanding of the characteristics of consumers and the impact of social interactions on business purchase decisions in scommerce can help merchants plan and position their marketing strategies. As well as, predefined customer base on pre-defined SNS.

Merchants must remain open and understandable to manage the external changes in brand awareness and customer relationship management to remain competitive. Merchants can integrate and apply the right social media strategy by simulating this innovative business strategy in organizational practices. For instance, Facebook provides free SNS and allows merchants to attract a large number of consumers.

Building a virtual store to sell products or services on SNS can be done almost free of charge, providing unrestricted access to a large number of potential customer segments, and increasing the brand equity of online companies. However, the importance of social interaction and the characteristics of a particular customer base need to be firmly understood to ensure the success of s-commerce.

# **5.4 LIMITATIONS OF THE STUDY**

The study conducted faced several constraints, limitations and obstacles. Identify and understand the constraint, limitation and obstacles is crucial allows other researcher to improve and further investigate the problems faced in online shopping intention.

The biggest limitation of this study is the sample's demographic. Most of the respondents are living in the Klang Valley, which sample data collected may not able to represent all the respondents from different states within Malaysia. Other than that, the population of sample size was too small. A total 300 hard copy of questionnaires distributed, however there were only 273 respondents returned and fully answered.

There are limited study and research on eTrust as one of the predictor to predict how Malaysians towards the online shopping intention. There are also has the limit access to the online database and journal articles related to Malaysia consumer behaviour. For instance, during the preliminary study of this research, some of the well journal require a certain amount of payment. While some other useful journals articles are not available within the subscribed databases. Furthermore, the major limitation that the researcher faced is the insufficient articles journals related to this study. And, all the journal articles collected focus on the oversea and different ethnic which is totally different from Malaysia demographic and culture.

Lack of financial resources can consider as one of the limitation found in this study. Example the problem such as restricted in money. This is because the researcher is still a student and has not enough sufficient money to concentrate and support on the research. Another problem is the researcher need to spend money went to the other states to distribute questionnaire and collect the data. Thus, all of the spending expenses needs to consideration by researcher.

## **5.5 RECOMMENDATIONS FOR FUTURE RESEARCH**

Above were the few limitations that had been found in this study. Therefore, further improvement is required to better understand and identify the true influence to the Malaysian research topic of online purchase intention. The following suggested recommendations were believed it could help the researchers to further investigate eTrust and social influence would affect the Malaysian online purchase intention.

Due to the time constraint and the sampling demographic problem, researcher only received returned 273 useful questionnaires from targeted group. This small sample size, which may not be accurate enough to represent the whole society's to intend to purchase online. Therefore, in order to have more comprehensive investigation, future researcher may require to enlarging the number of sample size to have greater degree of accuracy and result. Besides, different time in the data collection and wider geographical areas are recommended. The number of respondents can be increased to 500 respondents and distributed to each state fairly.

Secondly, researcher needs to conduct on questionnaire by adding more questions. Researcher also can prepare some gifts for respondents who participated in the survey. It can encourage them to response more accurate in the questions. It is also to avoid respondents simply answering the questions. Researcher has to read out the questions one by one to them if they cannot understand the questions. Researcher also can implement more explanation on the questions before having respondents to answer the questionnaire.

Lastly, financial resource is crucial as well as way. If the researcher with a stronger financial foundation, then the study can be carried out at a larger region to explore worldwide. Research can understanding a wider scope of demographic, geographic and cultural factors can be acquired and drastically to enhance the accurate and feasibility of the consequence result. Therefore, future researchers should conduct a research from a variety wider geographical location in order to get more respondents such as target on the overseas countries. By the way, the results are more sufficient and more accurate. Therefore, collected from different respondents will reflecting on their perception toward intention to purchase online.

# **5.6 CONCLUSION**

The power of e-commerce has changed the shopping habits of customers. Customers no longer rely solely on physical cues to make purchase decisions. The study developed and tested a research model that explained the determinants of online purchase intent for e-commerce and s-commerce. This conceptual framework will be divided into e-commerce (system quality, service quality and information quality) and s-commerce (performance expectancy, social influence and habit). In e-commerce is mainly to test how website qualities influence online purchase intention with the eTrust as mediator. While, s-commerce is to examine how the social activities direct influence their online purchase intention among the millennial and iGen in Malaysia.

In order to enhance competitiveness, merchants should pay more attention to website quality in the form of improving website usability, design and information quality. This is because these factors may affect the intention to purchase online. Most importantly, merchants also need to increase consumer trust in their services. To some extent, the results of this study provide useful meaning for e-commerce practitioners.

#### REFERENCES

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. Berlin: Springer.

- Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., & Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*.
- Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., & Wood, S. (1997). Interactive home shopping: consumer, retailer, and manufacturer incentives to participate in electronic marketplaces. *The Journal of Marketing*, 38-53.
- Al-Debei, M. M., Akroush, M. N., & Ashouri, M. I. (2015). Consumer attitudes towards online shopping: the effects of trust, perceived benefits, and perceived web quality. *Internet Research*, 25(5), 707-733.
- Andriole, S. J. (2010). Business impact of Web 2.0 technologies. *Communications of the ACM*, 53(12), 67-79.
- Asean Up. (2018). *Top 10 e-commerce sites in Malaysia 2018*. Retrieved 30 May, 2018, from ASEAN UP: https://aseanup.com/top-e-commerce-sites-malaysia
- Ballou, J., & Lavrakas, P. J. (2008). *Encyclopedia of survey research methods* (Vol. 2). Los Angeles: Sage.
- Baluja, S., Seth, R., Sivakumar, D., Jing, Y., Yagnik, J., Kumar, S., . . . Aly, M. (2008). Video suggestion and discovery for youtube: taking random walks through the view graph. *Proceedings of the 17th international conference on World Wide Web*, 895-904.
- Bellman, S., Lohse, G. L., & Johnson, E. J. (1999). Predictors of online buying behavior. *Communications of the ACM*, 42(12), 32-38.
- Bhattacherjee, A. (2002). Individual trust in online firms: Scale development and initial test. *Journal of Management Information Systems*, 19(1), 211-241.
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-mediated Communication*, 13(1), 210-230.
- Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online communities: Conceptualizing the online social network. *Journal of Interactive Marketing*, 21(3), 2-20.
- Chen, C., & Cheng, C. (2009). Understanding consumer intention in online shopping: a respecification and validation of the DeLone and McLean model. *Behaviour & Information Technology*, 28(4), 335-345.
- Cheung, C. M., Chiu, P. Y., & Lee, M. K. (2011). Online social networks: Why do students use facebook? *Computers in Human Behavior*, 27(4), 1337-1343.

- Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, 77(4), 511-535.
- Chiu, C. M., Chang, C. C., Cheng, H. L., & Fang, Y. H. (2009). Determinants of customer repurchase intention in online shopping. *Online Information Review*, *33*(4), 761-784.
- Chiu, C. M., Hsu, M. H., Lai, H., & Chang, C. M. (2012). Re-examining the influence of trust on online repeat purchase intention: The moderating role of habit and its antecedents. *Decision Support Systems*, *53*(4), 835-845.
- Corritore, C. L., Kracher, B., & Wiedenbeck, S. (2003). On-line trust: concepts, evolving themes, a model. *International Journal of Human-Computer Studies*, 58(6), 737-758.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks: Sage.
- Culnan, M. J., McHugh, P. J., & Zubillaga, J. I. (2010). How large US companies can use Twitter and other social media to gain business value. *MIS Quarterly Executive*, 9(4).
- Dan, B., Xu, G., & Liu, C. (2012). Pricing policies in a dual-channel supply chain with retail services. *International Journal of Production Economics*, 139(1), 312-320.
- Das, D. (2018). *What is e-commerce and types of e-commerce with diagram*. Retrieved 1 June, 2018, from CSETutor: https://www.csetutor.com/what-is-e-commerce-types-of-e-commerce
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.
- de Jong, T. M., & Van Der Voordt, D. J. (2002). Ways to Study and Research: Urban, Architectural and Technical Design, IOS Press.
- Delone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: a ten-year update. *Journal of Management Information Systems*, 19(4), 9-30.
- Delone, W. H., & Mclean, E. R. (2004). Measuring e-commerce success: Applying the DeLone & McLean information systems success model. *International Journal of Electronic Commerce*, 9(1), 31-47.
- Dwyer, C., Hiltz, S. R., & Passerini, K. (2007). Trust and privacy concern within social networking sites: A comparison of Facebook and MySpace.
- Escobar-Rodríguez, T., & Carvajal-Trujillo, E. (2013). Online drivers of consumer purchase of website airline tickets. *Journal of Air Transport Management, 32*, 58-64.

- Escobar-Rodríguez, T., & Carvajal-Trujillo, E. (2014). Online purchasing tickets for low cost carriers: An application of the unified theory of acceptance and use of technology (UTAUT) model. *Tourism Management*, *43*, 70-88.
- Farag, S., Schwanen, T., Dijst, M., & Faber, J. (2007). Shopping online and/or in-store? A structural equation model of the relationships between e-shopping and in-store shopping. *Transportation Research Part A: Policy and Practice*, 41(2), 125-141.
- Fielding, K. S., McDonald, R., & Louis, W. R. (2008). Theory of planned behaviour, identity and intentions to engage in environmental activism. *Journal of Environmental Psychology*, 28(4), 318-326.
- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behavior: An introduction to theory and research.
- Fricker, R. D., & Schonlau, M. (2002). Advantages and disadvantages of Internet research surveys: Evidence from the literature. *Field Methods*, *14*(4), 347-367.
- Gao, L., Waechter, K. A., & Bai, X. (2015). Understanding consumers' continuance intention towards mobile purchase: A theoretical framework and empirical study– A case of China. *Computers in Human Behavior*, *53*, 249-262.
- Gefen, D., & Straub, D. (2003a). Managing user trust in B2C e-services. e-Service. *e-Service*, 2(2), 7-24.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003b). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51-90.
- Gentry, L., & Calantone, R. (2002). A comparison of three models to explain shop-bot use on the web. *Psychology & Marketing*, 19(11), 945-956.
- Ghosh, S. (1998). Making business sense of the Internet. *Harvard Business Review*, 76(2), 126-135.
- Gunasekaran, A., Marri, H. B., McGaughey, R. E., & Nebhwani, M. D. (2002). Ecommerce and its impact on operations management. *International Journal of Production Economics*, 75(1-2), 185-197.
- Guo, Y., & Barnes, S. (2009). Virtual item purchase behavior in virtual worlds: an exploratory investigation. *Electronic Commerce Research*, 9(1-2), 77-96.
- Gupta, D. C., Bindal, M., Agarwal, N., & Khandelwal, K. (2018). Traditional commerce v/s e-commerce and impact of demonetization on e-commerce. *International Journal of Engineering and Management Research*, 8(2), 136-142.
- Gwinner, C. (2006). Infosurv white paper: 5-Point vs 6-Point Likert scales. *Infosurv Online Research Service*.
- Hair, J. F. (2015). Essentials of Business Research Methods, ME Sharpe.

- Hajli, M. N. (2014). A study of the impact of social media on consumers. *International Journal of Market Research*, 56(3), 387-404.
- Hargadon, A. B., & Bechky, B. A. (2006). When collections of creatives become creative collectives: A field study of problem solving at work. *Organization Science*, 17(4), 484-500.
- Häubl, G., & Trifts, V. (2000). Consumer decision making in online shopping environments: The effects of interactive decision aids. *Marketing Science*, 19(1), 4-21.
- Heijden, H., & Verhagen, T. (2002). Measuring and assessing online store image: a study of two online bookshops in the Benelux. *Proceedings of the 35th Annual Hawaii International Conference on System Sciences 2002*, 2639-2646.
- Hoffman, D. L., Novak, T. P., & Chatterjee, P. (1995). Commercial scenarios for the web: opportunities and challenges. *Journal of Computer-mediated Communication*, 1(3).
- Hoffman, D. L., Novak, T. P., & Peralta, M. (1999). Building consumer trust online. *Communications of the ACM*, 42(4), 80-85.
- Hox, J. J., & Boeije, H. R. (2005). Data collection, primary vs. secondary. *Encyclopedia of Social Measurement*, 593-599.
- Hsu, C. L., & Lin, J. C. (2015). What drives purchase intention for paid mobile apps?–An expectation confirmation model with perceived value. *Electronic Commerce Research and Applications*, 14(1), 46-57.
- Hsu, C. L., Chang, K. C., & Chen, M. C. (2012). The impact of website quality on customer satisfaction and purchase intention: perceived playfulness and perceived flow as mediators. *Information Systems and e-Business Management*, *10*(4), 549-570.
- Huang, Z., & Benyoucef, M. (2013). From e-commerce to social commerce: A close look at design features. *Electronic Commerce Research and Applications*, 12(4), 246-259.
- Indrawati, I., & Riyadi, S. (2016). Factors affecting consumers' decision toward kios tiket mandiri adoption in purchasing train tickets in Indonesia. *International Seminar & Conference on Learning Organization (ISCLO)*.
- Jansen, B. J., Zhang, M., Sobel, K., & Chowdury, A. (2009). Twitter power: Tweets as electronic word of mouth. *Journal of the American Society for Information Science* and Technology, 11, 2169-2188.
- Jarvenpaa, S. L., & Todd, P. A. (1996). Consumer reactions to electronic shopping on the World Wide Web. *International Journal of Electronic Commerce*, 1(2), 59-88.
- Jones, S. (2002). The Internet goes to college: How students are living in the future with today's technology.

- Junco, R., Heiberger, G., & Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning*, 27(2), 119-132.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68.
- Khalifa, M., & Liu, V. (2007). Online consumer retention: contingent effects of online shopping habit and online shopping experience. *European Journal of Information Systems*, *16*(6), 780-792.
- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems*, 44(2), 544-564.
- Kim, H. W., Xu, Y., & Koh, J. (2004). A comparison of online trust building factors between potential customers and repeat customers. *Journal of the Association for Information Systems*, 5(10), 13.
- Kim, J., Jin, B., & Swinney, J. L. (2009). The role of etail quality, e-satisfaction and e-trust in online loyalty development process. *Journal of Retailing and Consumer Services*, 16(4), 239-247.
- Kim, Y., & Peterson, R. A. (2017). A meta-analysis of online trust relationships in ecommerce. *Journal of Interactive Marketing*, 38, 44-54.
- Klein, L. R. (1998). Evaluating the potential of interactive media through a new lens: Search versus experience goods. *Journal of Business Research*, 41(3), 195-203.
- Koniordos, S. M. (2017). *Networks, trust and social capital: Theoretical and empirical investigations*. Abingdon: Routledge.
- Koss, M. (2018). We rounded up the social strategies you need for eCommerce success. Retrieved 30 May, 2018, from Yotpo: https://www.yotpo.com/blog/the-4-most-powerful-social-commerce-trends/
- Kotler, P. (2006). Kotler on Marketing: How to create, win, and dominate markets.
- Lackey, N. R., & Wingate, A. (1997). The pilot study: One key to research success. *Advanced Design in Nursing Research*, 375.
- Laudon, K. C., & Traver, C. G. (2013). E-commerce. London: Pearson.
- Leiner, B. M., Cerf, V. G., Clark, D. D., Kahn, R. E., Kleinrock, L., Lynch, D. C., ... Wolff, S. (2009). A brief history of the Internet. ACM SIGCOMM Computer Communication Review, 39(5), 22-31.
- Lewis, R. C., & Booms, B. H. (1983). *Emerging Aspects of Service Quality in Emerging Perspectives on Services Marketing*. Chicago: American Marketing Association.

- Liang, T. P., Ho, Y. T., Li, Y. W., & Turban, E. (2011). What drives social commerce: The role of social support and relationship quality. *International Journal of Electronic Commerce*, 16(2), 69-90.
- Liebermann, Y., & Stashevsky, S. (2002). Perceived risks as barriers to Internet and ecommerce usage. *Qualitative Market Research: An International Journal*, 5(4), 291-300.
- Lim, K. S., Heinrichs, J. H., & Lim, J. S. (2009). Testing a MIMIC model of e-shopping site usage. *International Journal of Retail & Distribution Management*, 37(10), 852-866.
- Limayem, M., Khalifa, M., & Frini, A. (2000). What makes consumers buy from Internet? A longitudinal study of online shopping. *IEEE Transactions on Systems, Man, and Cybernetics-Part A: Systems and Humans, 30*(4), 421-432.
- Lin, H. F. (2007). The impact of website quality dimensions on customer satisfaction in the B2C e-commerce context. *Total Quality Management and Business Excellence*, 18(4), 363-378.
- Liobikienė, G., Mandravickaitė, J., & Bernatonienė, J. (2016). Theory of planned behavior approach to understand the green purchasing behavior in the EU: A cross-cultural study. *Ecological Economics*, *125*, 38-46.
- Liu, C., Marchewka, J. T., Lu, J., & Yu, C. S. (2005). Beyond concern—a privacy-trustbehavioral intention model of electronic commerce. *Information & Management*, 42(2), 289-304.
- Liu, R. (2017). Southeast Asia: The latest arena in the shopping app battle. Retrieved 30 May, 2018, from App Annie: https://www.appannie.com/en/insights/market-data/southeast-asia-the-latest-arena-for-shopping-app-battle
- Lu, B., Fan, W., & Zhou, M. (2016). Social presence, trust, and social commerce purchase intention: an empirical research. *Computers in Human Behavior*, *56*, 225-237.
- Luhmann, N. (2018). Trust and power. New Jersey: John Wiley & Sons.
- Malaysian Communications and Multimedia Commission. (2017). *Internet user survey* 2017. Cyberjaya: Malaysian Communications and Multimedia Commission.
- Mathers, N., Fox, N., & Hunn, A. (2007). Surveys and questionnaires. Trent: RDSU.
- McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research*, *13*(3), 334-359.
- Mills, G. E., & Gay, L. R. (2016). *Educational research: Competencies for analysis and applications*. New Jersey: Pearson.

- Min, Q., Ji, S., & Qu, G. (2008). Mobile commerce user acceptance study in China: a revised UTAUT model. *Tsinghua Science and Technology*, *13*(3), 257-264.
- Moon, J. W., & Kim, Y. G. (2001). Extending the TAM for a World-Wide-Web context. *Information & Management, 38*(4), 217-230.
- Neuman, S. P. (2005). Trends, prospects and challenges in quantifying flow and transport through fractured rocks. *Hydrogeology Journal*, *13*(1), 124-147.
- Nguyen, Q. (2017). Cross-border B2C e-commerce in Southeast Asia: Key trends and solutions. Retrieved 30 May, 2018, from Medium: https://medium.com/fast-forward-advisors-blog/cross-border-b2c-e-commerce-in-southeast-asia-key-trends-and-solutions-bcf34cdae939
- Ogonowski, A., Montandon, A., Botha, E., & Reyneke, M. (2014). Should new online stores invest in social presence elements? The effect of social presence on initial trust formation. *Journal of Retailing and Consumer Services*, 21(4), 482-491.
- O'Murchu, I., Breslin, J. G., & Decker, S. (2004). Online social and business networking communities. *In ECAI Workshop on Application of Semantic Web Technologies to Web Communities*, 107.
- Oppenheim, A. N. (2000). London: Bloomsbury Publishing.
- Overby, J. W., & Lee, E. J. (2006). The effects of utilitarian and hedonic online shopping value on consumer preference and intentions. *Journal of Business Research*, 59(10-11), 1160-1166.
- Ozaki, R., & Sevastyanova, K. (2011). Going hybrid: An analysis of consumer purchase motivations. *Energy Policy*, 39(5), 2217-2227.
- Parasuraman, A. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Parsons, A. L. (2011). Social media from a corporate perspective: A content analysis of official Facebook pages. Allied Academies International Conference. Academy of Marketing Studies, 16(2), 11.
- Patch, C. S., Tapsell, L. C., & Williams, P. G. (2005). Attitudes and intentions toward purchasing novel foods enriched with omega-3 fatty acids. *Journal of Nutrition Education and Behavior*, 37(5), 235-241.
- Pavlik, J. V. (1996). *New media technology: Cultural and commercial perspectives*. Boston: Allyn & Bacon.
- Piper, D., & Scharf, A. (2004). Descriptive analysis state of the art and recent developments. *Series Sensory Analysis*, 17-21.
- Polit, D. F., Beck, C. T., & Hungler, B. P. (2006). Essentials of nursing research: Methods, appraisal and utilization. *6*.

- Ponte, E. B., Carvajal-Trujillo, E., & Escobar-Rodríguez, T. (2015). Influence of trust and perceived value on the intention to purchase travel online: Integrating the effects of assurance on trust antecedents. *Tourism Management*, *47*, 286-302.
- Rai, A., Lang, S. S., & Welker, R. B. (2002). Assessing the validity of IS success models: An empirical test and theoretical analysis. *Information systems research*, 13(1), 50-69.
- Ramsey, J. B., Newton, H. J., & Harvill, J. L. (2002). *The elements of statistics: With applications to economics and the social sciences*. Duxbury: Cengage.
- Rayport, J. F., & Sviokla, J. J. (1995). Exploiting the virtual value chain. *Harvard Business Review*, 73(6), 75.
- Richard, T. (2013). Qualitative versus quantitative methods: Understanding why qualitative methods are superior for criminology and criminal justice.
- Roghanizad, M. M., & Neufeld, D. J. (2015). Intuition, risk, and the formation of online trust. *Computers in Human Behavior*, *50*, 489-498.
- Rowett, C. (16 June, 2011). *Comparing online retail to the high street*. Retrieved 2018, from Econsultancy: https://www.econsultancy.com/blog/7575-comparing-online-conversion-rates-to-the-high-street
- San Martín, H., & Herrero, Á. (2012). Influence of the user's psychological factors on the online purchase intention in rural tourism: Integrating innovativeness to the UTAUT framework. *Tourism Management*, *33*(2), 341-350.
- Saundage, D., & Lee, C. Y. (2011). Social commerce activities-a taxonomy. Academy of Contemporary Islamic Studies.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. London: Pearson.
- Schmitz, S. W., & Latzer, M. (2002). Competition in B2C e-Commerce: analytical issues and empirical evidence. *Electronic Markets*, 12(3), 163-174.
- Shim, S., Eastlick, M. A., Lotz, S. L., & Warrington, P. (2001). An online prepurchase intentions model: the role of intention to search: best overall paper award—the sixth triennial AMS/ACRA retailing conference. *Journal of Retailing*, 77(3), 397-416.
- Sparks, B. A., So, K. K., & Bradley, G. L. (2016). Responding to negative online reviews: The effects of hotel responses on customer inferences of trust and concern. *Tourism Management*, 53, 74-85.
- Suki, N. M., & Suki, N. M. (2011). Job satisfaction and organizational commitment: The effect of gender. *International Journal of Psychology Research*, 6(5), 1-15.

- Surbhi, S. (2016). *Difference between traditional commerce and e-commerce*. Retrieved 31 May, 2018, from Key Differences: https://keydifferences.com/difference-between-traditional-commerce-and-e-commerce.html
- Thompson, R. L., Higgins, C. A., & Howell, J. M. (1991). Personal computing: toward a conceptual model of utilization. *MIS Quarterly*, 125-143.
- Ting, K. C., Ting, P. H., & Hsiao, P. W. (2014). Why are bloggers willing to share their thoughts via travel blogs? *International Journal of Technology Management*, 64(1), 89-108.
- Turban, E., King, D., Lee, J., Liang, T., & Turban, D. (2012). *Electronic Commerce 2012: A managerial and social network perspective* (7th ed.). London: Pearson.
- Urban, G. L., Sultan, F., & Qualls, W. J. (2000). Placing trust at the center of your Internet strategy. *Sloan Management Review*, 42(1), 39-48.
- Van der Heijden, H., Verhagen, T., & Creemers, M. (2003). Understanding online purchase intentions: contributions from technology and trust perspectives. *European Journal of Information Systems*, *12*(1), 41-48.
- Van House, N. A. (2007). Flickr and public image-sharing: distant closeness and photo exhibition. *CHI '07 Extended Abstracts on Human Factors in Computing Systems*, 2717-2722.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 425-478.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 157-178.
- Verplanken, B., Aarts, H., & Van Knippenberg, A. (1997). Habit, information acquisition, and the process of making travel mode choices. *European Journal of Social Psychology*, 27(5), 539-560.
- Wang, H., Lee, M. K., & Wang, C. (1998). Consumer privacy concerns about Internet marketing. *Communications of the ACM*, 41(3), 63-70.
- Wang, L., Law, R., Guillet, B. D., Hung, K., & Fong, D. K. (2015). Impact of hotel website quality on online booking intentions: eTrust as a mediator. *International Journal of Hospitality Management*, 47, 108-115.
- Wang, Y. D., & Emurian, H. H. (2005). An overview of online trust: Concepts, elements, and implications. *Computers in Human Behavior*, 21(1), 105-125.
- Weeks, M. (2018). The Evolution and Design of Digital Economies.
- Whitlark, D. B., Geurts, M. D., & Swenson, M. J. (1993). New product forecasting with a purchase intention survey. *The Journal of Business Forecasting*, *12*(3), 18.
- Wilson, H. N., Daniel, E. M., Sutherland, F., McDonald, M. H., & Ward, J. (2001). Profiting from eCRM in action: Making the new marketing work.
- Wright, K. B. (2005). Researching Internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-mediated Communication*, 10(3).
- Yadav, R., & Pathak, G. S. (2016). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *Journal of Cleaner Production*, 135, 732-739.
- Yu, P. L., Balaji, M. S., & Khong, K. W. (2015). Building trust in Internet banking: a trustworthiness perspective. *Industrial Management & Data Systems*, 115(2), 235-252.
- Zahedi, F. M., & Song, J. (2008). Dynamics of trust revision: using health infomediaries. *Journal of Management Information Systems*, 24(4), 225-248.
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). An empirical examination of the service quality-value-loyalty chain in an electronic channel.
- Zhao, H. H., Gao, Q., Wu, Y. P., Wang, Y., & Zhu, X. D. (2014). What affects green consumer behavior in China? A case study from Qingdao. *Journal of Cleaner Production, 63*, 143-151.
- Zhou, T. (2011). An empirical examination of initial trust in mobile banking. *Internet Research*, 21(5), 527-540.
- Zikmund, W. (2003). Business research methods (7th ed.). Mason: Thomson South-Western.

### **APPENDIX A: QUESTIONNAIRE**



# UNIVERSITI TUNKU ABDUL RAHMAN FACULTY OF ACCOUNTANCY AND MANAGEMENT MASTER OF BUSINESS ADMINISTRATION

#### SURVEY QUESTIONNAIRE

Dear respondents,

I am conducting a research study entitled **"Website qualities and social activities towards online purchase intention among Millennial and iGen in Klang Valley"** for my final year project. The purpose of this research study is to examine the online purchase intention in e-commerce and s-commerce. Your participation in this research study will help in contributing to the understanding of individual intention to online shopping.

This questionnaire should take about 3-5 minutes to complete. The findings of this survey will only be used for academic purpose and your answers will be kept **private and confidential**. No individual respondents will be identified due to this is an anonymous questionnaire. Moreover, I am much honored that you are willing to spend your time to help us complete the questionnaire.

Kindly contact through the email below if you had any enquiries or comments. Email: tkw\_555@hotmail.com

Thank you.

Regards, TAN KWONG WENG (17 UKM 05207)

### Section A: Demographic information

Please **tick**  $\square$  the answers in the following boxes provided or **fill in the blank** for each of the following items.

- 1. Gender:
  - □ Male
  - □ Female
- 2. Age:
  - $\square$  Below 20
  - □ 21 25
  - □ 26 30
  - □ 31 35
  - □ 36 40
- 3. Ethnicity origin (or Race):
  - □ Malay
  - $\Box$  Chinese
  - Indian
  - □ Others: \_\_\_\_\_
- 4. Highest education qualification:
  - □ Foundation
  - □ Bachelor's degree
  - □ Postgraduate studies
  - □ Others: \_\_\_\_\_
- 5. Employment status:
  - □ Unemployment
  - □ Self-employed
  - □ Employed for wages
  - $\Box$  Student
  - □ Others: \_\_\_\_\_

- 6. Income level:
  - □ RM1000 and below
  - □ RM1001 to RM2000
  - □ RM2001 to RM3000
  - □ RM3001 to RM4000
  - $\square$  RM4001 and above
- 7. How often you visit online shopping website:
  - $\square$  Less than once per month
  - $\Box$  1 3 times per month
  - $\Box$  4 6 times per month
  - $\Box$  7 9 times per month
  - $\square$  10 or more times per month
- 8. How often you make a decision to purchase a product or service online:
  - $\Box$  Less than once per month
  - $\Box$  1 3 times per month
  - $\Box$  4 6 times per month
  - $\Box$  7 9 times per month
  - $\square$  10 or more times per month
- 9. Which online shopping website do you typically used:
  - 🗆 Taobao
  - 🗆 Lazada
  - □ 11street
  - □ Shopee
  - □ Others: \_\_\_\_\_

10. What type of product or service do you usually purchase online (allow multiple answers):

Fashion-related products
Books/ Music/ Stationaries
IT & Mobile
Beauty and health care (e.g. cosmetic)
Food ordering
Travel products and services (e.g. hotel, tickets)
Others: \_\_\_\_\_\_

11. Have you had any bad online shopping experiences:

 $\square$  Yes

 $\square \ No$ 

12. What are your biggest concerns about online shopping? Rank 1 to 7 (*from very important to fairly important*).

System Quality	
Service Quality	
Information Quality	
Trust	
Performance Expectations	
Social Influence	
Habit	

#### Section B: Website qualities and social activities towards online purchase intention

Please **tick**  $\square$  one of the numbers that represents most accurately on your opinion of the factors that influence the intention of online shopping.

- **1** = Strongly Disagree (SD)
- $\mathbf{2} = \text{Disagree}(\mathbf{D})$
- $\mathbf{3} = \text{Neutral}(N)$
- $\mathbf{4} = \text{Agree}(A)$
- **5** = Strongly Agree (SA)

Γ	V - SYSTEM QUALITY					
		SD	D	Ν	A	SA
1.	The website has an appropriate design style.	1	2	3	4	5
2.	The website is easy to navigate information.	1	2	3	4	5
3.	The website has fast response and transaction processing.	1	2	3	4	5
4.	The website protects personal information secure from exposure.	1	2	3	4	5
5.	The website provides relevant and good features.	1	2	3	4	5
6.	The website ensures error-free transactions.	1	2	3	4	5
Γ	V - SERVICE QUALITY					
1.	The website responds to user needs and requests without delay.	1	2	3	4	5
2.	The website promises to be trusted.	1	2	3	4	5
3.	The website can instil user confidence and reduces uncertainty.	1	2	3	4	5
4.	The website understands and adapts to the specific needs of users.	1	2	3	4	5
5.	The website provides follow-up services to users.	1	2	3	4	5
6.	The website provides a professional and capable image.	1	2	3	4	5

#### **IV - INFORMATION QUALITY** SD D N A SA 1. The website has sufficient content to find expected information. 2. The website provides complete information. 3. The website provides site-specific information. 4. The website provides accurate information. 5. The website provides timely information. 6. The website provides reliable information. IV – eTrust 1. The website can handle sales transactions via the Internet. 2 3 2. The website does not deceive customers. 3. The website fulfils its commitments. 4. The website provides reliable information. 5. The website is designed to consider the needs of consumers. 6. The website recommendations are developed for mutual benefit. 7. I kept my personal information on the website when buying product online. **IV - PERFORMANCE EXPECTANCY** 1. I found that social media to be very useful during the purchase process. 2. Using social media has increased my chances of achieving things that are important to me during the purchase process. 3. Using social media can help me get things done faster during the purchase process. 4. I can save time when I use social media during the purchase process.

Γ	V - SOCIAL INFLUENCE					
		SD	D	N	A	SA
1.	People who are important to me think that I should use	1	2	2	4	5
	social media to make purchases.	1	2	3		
2.	People who influence my behaviour think that I should use	1	2	3	1	5
	social media to make purchases.	1	2	3	4	5
3.	People whose opinions that I value prefer that I use social	1	2	3	Δ	5
	media to make purchases.	1	2	J	+	5
4.	The brand presence on the social media, important to me	1	2	2	4	5
	when making online purchases.	1	L	5	4	
5.	The complaint, questions and respond after my online	1	2	3	1	5
	purchasing decisions	1	2	5	4	5
Γ	V – HABIT					
1.	I will check the comments, reviews, rating, or respond on	4	2	2	4	5
	social media before purchase online has become my habit.	1	2	3	4	
2.	Social media comments, reviews, rating, or respond are my	1	2	3	4	5
	major reference when purchase online.	1	L	5	4	3
3.	I believe the comments, reviews, rating, or respond on social	1	2	3	4	5
	media are fair.	1	L	5		
4.	4. I trust the comments, reviews, rating, or respond on	1	2	3	Δ	5
	social media without thinking.	1	2	5	т	5
D	V - ONLINE PURCHASE INTENTION					
1.	I intend to make a purchase at online store.	1	2	3	4	5
<u> </u>	I avport to make a nurchase at online store in the future	1	<b>^</b>	2	1	5
۷.	r expect to make a purchase at omme store in the future.	1	Z	3	4	3
3.	I will probably make a purchase at online store in the near	1	2	3	4	5
	future.					

## -----THANK YOU FOR YOUR PARTICIPATION------