

**INTI INTERNATIONAL UNIVERSITY**

**MASTER OF BUSINESS ADMINISTRATION**

**E-Commerce Platforms' Brand Equity in Malaysia**

<b>Author:</b>	Qiao Shuai
<b>Student No:</b>	I18015085
<b>Supervisor:</b>	Dr. Sam Toong Hai
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## **DECLARATION**

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Name: QIAO SHUAI

Student ID: I18015085

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## Table of Content

ABSTRACT .....	1
Chapter 1 Introduction .....	1
1.0 Overview .....	1
1.1 Background of Study .....	1
1.2 Problem Statement .....	5
1.3 Research Objectives .....	6
1.4 Research Questions .....	6
1.5 Significance of Study .....	7
1.5.1 Significance to Academy .....	7
1.5.2 Significance to E-commerce Platforms .....	7
1.6 Scope of Study .....	8
1.7 Limitation of Study .....	9
1.8 Operation of Study .....	9
1.9 Organization of Chapter .....	11
Chapter 2 Literature Review .....	14
2.0 Overview .....	14
2.1 Brand Equity .....	14
2.1.1 Global View on E-Commerce Brand Equity .....	15
2.1.2 E-commerce Brand Equity in Malaysia .....	17
2.2 Factors Influencing E-Commerce Brand Equity .....	19
2.2.1 E-commerce Website Design .....	19
2.2.2 E-commerce Commodity Quality .....	20
2.2.3 E-commerce Logistics Efficiency .....	21
2.2.4 E-commerce Customer Service Capability .....	22
2.3 Gaps in The Literature .....	23
2.4 Brand Equity Theory .....	24
2.5 Conceptual Framework .....	26

2.6 Hypotheses .....	27
2.7 Conclusion .....	27
Chapter 3 Research Methodology .....	28
3.0 Overview .....	28
3.1 Research Design.....	28
3.2 Study Population.....	30
3.3 Unit of Analysis .....	30
3.4 Sampling Design.....	31
3.5 Data Collection .....	31
3.6 Measurement Strategy.....	32
3.6.1 Pilot Test.....	32
3.6.2 Reliability Test .....	33
3.6.3 Descriptive Statistics.....	34
3.6.4 Factor Analysis.....	34
3.7 Design of Questionnaire.....	35
3.7.1 The Questions for Dependent Variable .....	36
3.7.2 Questions for Independent Variables.....	37
Chapter 4 Research Findings .....	40
4.0 Overview .....	40
4.1 Pilot Test .....	40
4.1.1 Factor Analysis of Pilot Test .....	40
4.1.2 Reliability Test of Pilot Test.....	42
4.2 Descriptive Statistics.....	43
4.3 Data Reliability Test.....	46
4.3.1 Factor Analysis.....	46
4.3.2 Reliability Test .....	48
4.4 Hypothesis Test .....	49
4.5 Multiple Regression .....	54
4.6 Correlation Test.....	56
4.7 One-way ANOVA of TOP 3 Malaysia E-commerce Platforms.....	57

4.8 Summary of Findings.....	58
4.9 Chapter Conclusion.....	59
Chapter 5 Conclusion and Constructive Suggestion.....	60
5.0 Overview.....	60
5.1 Result Discussion.....	60
5.2 Recommendations.....	62
5.3 Contributions.....	66
5.3.1 Contribution to Academy.....	66
5.3.2 Contribution to E-commerce Platform Organizations.....	66
5.4 Limitation of Study.....	67
REFERENCE.....	68
Appendix 1: SPSS Output.....	78
Appendix 2: Initial Research Proposal Paper.....	95
Appendix 3: Questionnaire.....	100
Appendix 4: PROJECT PAPER LOG.....	105
Appendix 5: Turnitin Result.....	111

## **ABSTRACT**

As the economy rapid development, Malaysia e-commerce platforms are tending to grow and start competitive marketing strategies no matter Malaysian e-commerce platforms or Cross-border e-commerce providers in Malaysia.

This paper is aimed to study the e-commerce providers' brand equity in Malaysia. It will start from local and global view to analyze the online users and e-commerce providers' website design, commodity quality, logistics efficiency and customer service capability.

There are five chapters in this study at this moment. The first chapter is the brief and general statement of this study, for example, background, problem statement, and research objectives and research questions. The second chapter would state the literature review to talk about the brand equity in Malaysia and global. The third chapter is research methodology that includes research diagram design and some tables to illustrate the research. The fourth chapter is mainly illustrated the research findings as well as chapter five proposed some recommendations and suggestions.

**Key Words:** E-commerce Providers, Brand Equity, Website Design, Commodity Quality, Logistics Efficiency, Customer Service Capability

## **Chapter 1 Introduction**

### **1.0 Overview**

This study is purposed to search after the factors related to e-commerce providers' brand equity in Malaysia. Based on the previous studies, this study combined theory models and questionnaires to effectively explore the relationship among factors that associated with E-commerce providers' brand equity. In the meantime, the study gives constructive suggestions to Malaysia E-commerce providers.

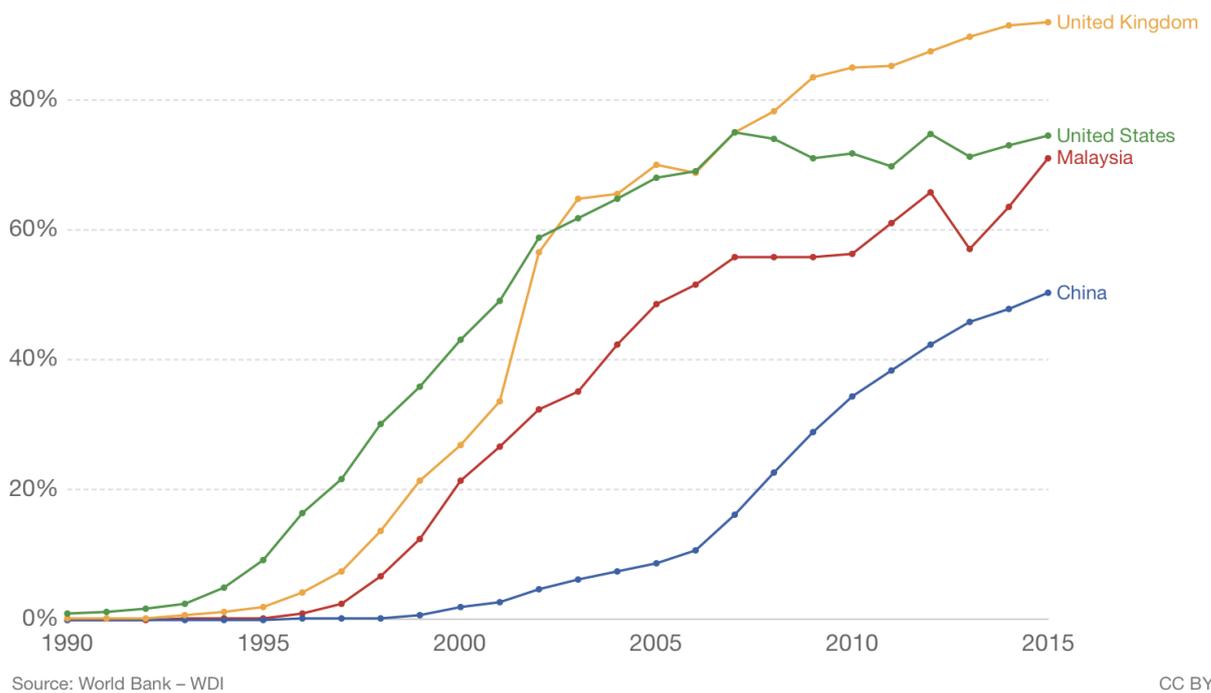
### **1.1 Background of Study**

The e-commerce has been the well-known digital channels that include data exchange transaction between companies and customers, and there are many different categories of e-commerce models that named their body involved consumers, corporations or government and so forth (Chin, Fauzi, Thenmoley, Elhussein and Asirvatham, 2018). Currently, e-commerce is seen to be an effective method for business trade, while the current adoption of e-commerce is not substantial in the perspective of both users and nonusers (Albert, Wong, Mohd and Cheng, 2017). As the matter of fact, the e-commerce adoption has extensive opportunities to support the SMEs to explore the market no matter in developed and developing countries (Kurnia, Choudrie, Mahbubur and Alzougool, 2015). On the other hand, the brand equity of e-commerce providers' has played an important role for SMEs choice and the adoption of platform in Malaysia was an issue that had contributed a significant power to grow and move forward the country's economy as well as the e-commerce platforms are springing up into the market recent time (Albert, Wong, Mohd and Cheng, 2017).

According to previous researches (Kurnia et al., 2015; Kurnia, Karnali and Rahim, 2015; Wu and Wu, 2015), these researches are focusing on the e-commerce adoption, e-commerce technology and e-commerce applied into different industries. This study

is combined Albert et al., (2017) study of Malaysian Small and Medium Enterprises retailing channels and Chin et al., (2018) study of e-commerce platforms analysis to deep explore brand equity in perspective of marketing, brand value, brand awareness and so forth.

According to the research of Albert et al., (2017), Malaysia has more than 22 million active web users that is 68% of populace and another 5 million are willing to use internet in the subsequent years. In the meantime, according to the World Bank data illustrated that see Malaysia in 2015 around 71% of population individuals were accessing to Internet that was almost approaching to the level of United States (Wu and Wu, 2015).

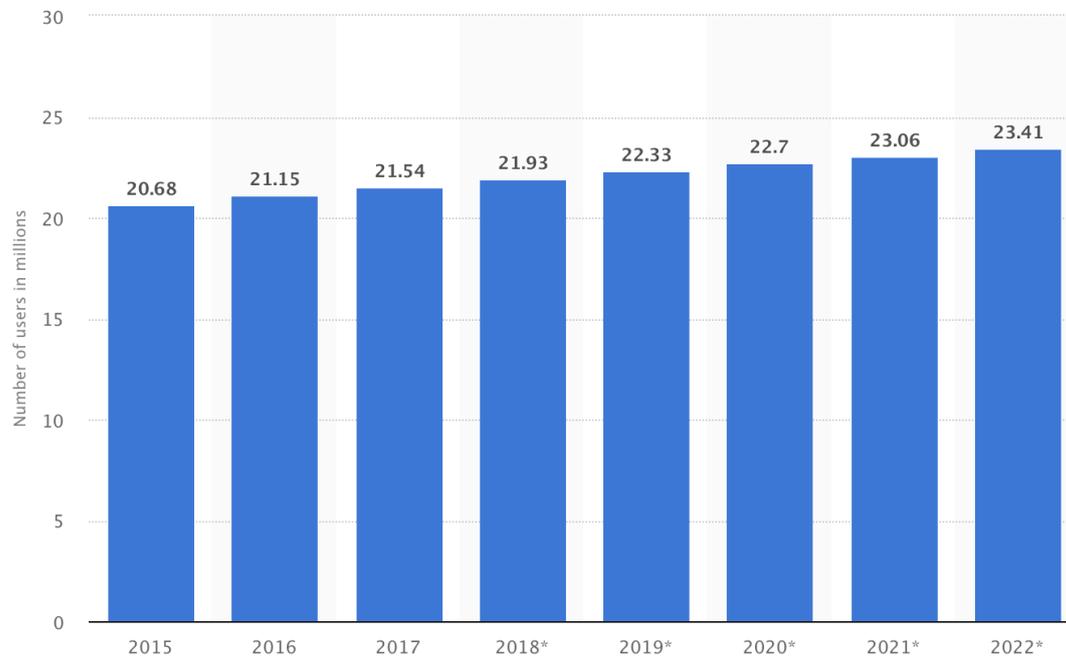


**Figure 1 Share of individuals using the internet**

**(Source: World Bank-WDI, 2015)**

After 2015, in accordance with the data from Statista (2018) as figure inserted below, we can see the number of Internet users in Malaysia from 2015 to 2022. The number

from 2018 to 2022 are forecasting in terms of the trend and growth. In 2015, 20.68 million users were accessing to Internet in Malaysia and this number is projected to grow to 23.41 million in 2022 (Wu and Wu, 2015).



**Figure 2 Number of Internet Users in Malaysia From 2015 to 2022 (in millions)**

**(Source: Statista, 2018)**

Therefore, there are extensive number of potential consumers and business opportunities in Malaysia and potential conversion rate from Internet users to e-commerce consumers (Chin et al., 2018).

According to Laudon and Traver (2018), there are five major types of e-commerce that include business to consumer (B2C), business to business (B2B) and consumer to consumer (C2C), peer to peer (P2P) and mobile commerce (M-commerce). These types are derived too many platforms and popular in developed and developing countries that is an effective marketing channels for organizations and individual consumers (Van Slyke, Belanger and Comunale, 2004). As one of the effective ways to conduct marketing or selling and buying among consumers and organizations,

regarding to online business and transactions without intermediary agents of sales personnel on the basis of website platform (Laudon and Traver, 2018).

The former research (Kuikka and Laukkanen, 2016) found that under the internet economy big environment, the consumers are more willing to shop online contributed to extensive growing e-commerce transactions made for e-commerce websites having competitive brand and high values in consumers' minds. Through the studies (Export.gov, 2018; Digital News Asia, 2017) shown that there are 3 major platforms in Malaysia's e-commerce landscape are Lazada, Zalora and 11 Street.

**Table 1 Top 3 Ranking of E-commerce in Malaysia**

Position	E-Commerce	Ranking Factors					Overall Avg. Rank
		Traffic	App Downloads	Twitter	Instagram	Facebook	
1	Lazada	1	2	2	7	1	2.6
2	Zalora	5	3	3	8	3	4.4
3	11 Street	2	4	1	18	6	6.2

**(Source: Digital News Asia, 2017)**

In the meantime, Thomas (2017) stated that with the increasing of online users and shopping customers, the future competition of Malaysia e-commerce market would be more fierce and competitive, which stimulate the development of brand strategy of e-commerce platforms providers. The marketing for B2B, B2C and C2C platforms are facing unprecedented challenges and barriers in Malaysia as the brand values of these platforms are not mature, brand equity are not developed and consumers lack of trust and confidence, and logistics transportation networks are not completed in which result in consumers are reluctant and unwilling to buy goods (Chin et al., 2018).

Hence, Zhao, Li and Pan (2015) suggested that in this Internet economy environment, e-commerce platform providers should come up with new marketing strategies and create marketing modes to improve its brand values and brand loyalty to enhance the brand equity. Comparing with traditional or physical store shopping, online shopping

would be the convenient way for consumers and businesses to save the time and optimize the process and curtail expenses and costs (Banerjee, 2016). To sum up, whether the major e-commerce platforms in perspective of B2B, B2C and C2C are focusing of the brand equity to attract customers or remain the clients will be the focus of this study (Chin et al., 2018).

## **1.2 Problem Statement**

The former studies (Albert et al., 2017; Banerjee, 2016; Zhao, Li and Pan, 2015) show that the e-commerce development and adoption progress and suggested business organizations are mainly making profit after business normal running 3 years, however, consumers would not willing to be loyalty at only one website less than 3 years that means consumers will change to the other new e-commerce platforms, which resulting in the loss of customers, decreasing of revenue, reducing of platform traffic. All these situations will finally lead to market stagnant and make e-commerce platform and companies towards bankruptcy (Mazzarol, 2015).

There are about 79.8% of consumers that will transfer e-commerce platform from one to other after customers' first purchasing in Malaysia (Lin and Wang, 2015). In addition, e-commerce is considerable in its infancy stage in Malaysia (Lee and Wong, 2016), the e-commerce market is expected to grow fast by 59.6% till in 2015 (Khatibi, Thyagarajan and Seetharaman, 2003). With the initiatives supported by government, e-commerce in Malaysia will have a prosperous future and as one of the driving engine of economy (Lee and Wong, 2016).

Therefore, e-commerce providers shall enhance its platforms' brand equity (Esch et al., 2006) and take the growth opportunity of e-commerce, and decrease the loss of e-commerce providers, this paper is aimed to study the factors of e-commerce website design, e-commerce commodity quality, e-commerce logistics and e-commerce customer service capabilities to research the e-commerce providers' brand equity in Malaysia.

### **1.3 Research Objectives**

As Albert et al. (2017) introduced that the e-commerce adoption in SMEs (Small and Medium Enterprises) takes 30% in website presence, the brand equity building after adoption of e-commerce is challengeable, which result in traditional construction way of brand equity is not appropriate for building e-commerce brand. In the perspective of customers' loyalty, awareness, recognition on one e-commerce platform, the problems of e-commerce platform have many influential factors especially on brand equity building (Wang and Liu, 2016). In addition, the former researches focuses on e-commerce adoption, e-commerce technological upgrading, which limited information on e-commerce platform influencing factors.

Thus, on the basis of literatures from Malaysia and other countries, the objectives of this study as below:

RO1: To determine whether E-commerce Website Design has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

RO2: To determine whether E-commerce Commodity Quality has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

RO3: To determine whether E-commerce Logistics Efficiency has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

RO4: To determine whether E-commerce Customer Service Capability has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

### **1.4 Research Questions**

On the basis of the research objectives, this study will explore potential factors that associated with e-commerce providers' brand equity in Malaysia, which consist of e-commerce website design, e-commerce commodity quality, e-commerce logistics efficiency, and e-commerce customer service capability (Esch et al., 2006). The

research questions are stated as below:

RQ 1: Does E-commerce Website Design have an influence on E-commerce Platforms' Brand Equity in Malaysia?

RQ 2: Does E-commerce Commodity Quality have an influence on E-commerce Platforms' Brand Equity in Malaysia?

RQ 3: Does E-commerce Logistics Efficiency have an influence on E-commerce Platforms' Brand Equity in Malaysia?

RQ 4: Does E-commerce Customer Service Capability have an influence on E-commerce Platforms' Brand Equity in Malaysia?

## **1.5 Significance of Study**

Gains undertaking from this study will be beneficial to the subsequent researches as below.

### **1.5.1 Significance to Academy**

This study will contribute positively to theory and the practice. In term of theoretical perspective, former researchers are focusing on the previous brand equity and adopting situation of e-commerce (Ahmad et al., 2015). In this study, on the basis of former studies of traditional brand equity and characteristics of e-commerce, this study explore the gaps and find out the specific factors in associated with Malaysia e-commerce brand equity, which is able to provide reference for the subsequent study. It contributes to the brand strategy management and research in e-commerce industry.

### **1.5.2 Significance to E-commerce Platforms**

E-commerce is not brand new in Malaysia. After government initiative of adopting e-commerce, the e-commerce industry is emerging (Silva et al., 2012). In

the perspective of practical significance, the advent of Internet and E-commerce accelerates trading and commerce companies development, this study can give e-commerce platforms' suggestion and direction that concerned by customers. E-commerce platforms analyze and meet the consumers' needs to enhance its platform brand equity to gain competitive advantages and turn brand equity to revenue during the market competition.

## **1.6 Scope of Study**

The context of this study is focusing in Malaysia, where the brand equity is been concerned by local consumers, and influenced by the online shopping environment (Chin et al., 2018).

According to Statista (2018) introduced that there are around 19.8 million e-commerce users in Malaysia, means more than half of Malaysians have online shopping experience. In light of brand equity, half of consumers are having different focuses. Thus, the study is primarily focus on group of young people, age ranged from 20 to 40 years old (those who were born from 1980 to 2012, also indicates as the Generation Y and Generation Z) since these groups of consumers have capability to shop online and willing to purchase products from e-commerce platform. As the below statistics illustrated that, 20 to 40 years group are the main online shopping users:

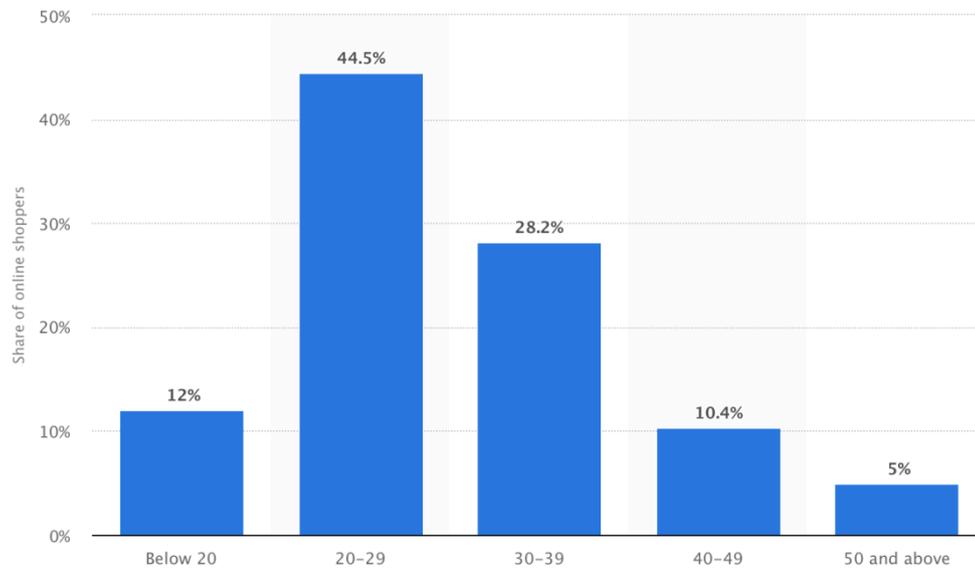


Figure 3 Age Group of Online Shoppers in Malaysia in 2016  
(Source: Statista, 2018)

### 1.7 Limitation of Study

There are several limitations exist and identified from the study. Firstly, time constraints are the most critical limitation for this research project. Secondly, the limited research resources for reference or to further deepen the study. In addition, according to Krejcie and Morgan (1970) sample size determination requirement, the sample size and age group still cannot represent and reflect the whole population of 31.62 million in Malaysia (World Bank, 2017). On the other hand, the research factors are only limited to 4 that related to E-commerce brand equity in Malaysia, which cannot ensure the completeness of the study that may have other influential factors related to Malaysian e-commerce platform brand equity.

### 1.8 Operation of Study

In order to make readers have easy, convenient and clear understanding for this study, hereby, list some critical terms or explanations for some uncommon terms as below table.

Table 2 Operation Definition

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<b>Key Term</b>	<b>Explanation</b>
Brand Equity (DV)	According to Esch, Langner, Schmitt and Geus (2006), authors stated that company takes a chain of marketing activities to create brand value to stimulate more sales and generate more profits, which make brand in a stronger and competitive advantage.
Brand Loyalty (Dimensions of DV)	As Lee, Moon, Kim and Yi (2015) suggested that brand loyalty is a customer behavior that committed to one brand and repeated purchasing to one brand that is determined by customers' preference.
Brand Awareness (Dimensions of DV)	It is the degree of consumers that recall or recognized one brand or its related products (Davick, da and Hair, 2015).
Brand Image (Dimensions of DV)	According to Laudon and Traver (2018), it is developed over time through a series of campaigns with a consistent theme and gives direct experience to consumers.
Brand Trust (Dimensions of DV)	It is created and developed through direct customer experience and the willingness of the average consumer to rely on the ability of the brand to perform its stated function (Esch et al., 2006).
E-commerce Website Design (IV)	It is a process of creating and updating websites, layout, graphic and site navigation (Lee et al., 2015).

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E-commerce Commodity Quality (IV)	The quality of products and services, the truth of information provided and performance of products provided by online platform (Laudon and Traver, 2018).
E-commerce Logistics Efficiency (IV)	According to Wang and Zhang (2016), it is defined as a part of supply chain management that included order command and fulfillment and effective flow of goods processing to achieve customers' requirements and distribute the item to named consignee.
E-commerce Customer Service Capability (IV)	It is the ability of a series processes among pre-sales service provided during earlier visiting, browsing and enquiry stage, on-purchase service and after-sales service provided to solve customers' enquiries and problems (Lam and Shankar, 2014).

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## 1.9 Organization of Chapter

In this study, there are Five (5) chapters as stipulated with different purposes that detailedly described and compiled in the following table.

Table 3 Organization of Chapter

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<b>Chapter</b>	<b>Aim of the Chapter</b>
<b>Chapter 1 Introduction</b>	This first chapter is initiated to introduce the background of the study, and elaborately state the development and situation of e-commerce industry in Malaysia. Subsequently, the problem statement is

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well defined, research objectives and research questions are been proposed. In the end, significance of study and scope of study have been introduced detailedly as well as the identified limitations.

## **Chapter 2 Literature Review**

The second chapter is aimed to review relevant literatures in regard to research title, dependent variable and independent variables. The beginning of this part is the definition of brand equity with literatures supporting. In perspective of global and local view on e-commerce brand equity, the paper started the research deeply. In the end, this paper illustrated gaps that associated with the purpose of the study that is beneficial to the future academic research and improve managerial value of this study.

## **Chapter 3 Research Methodology**

The third chapter demonstrates the research methodology and design in regard to the research data activities. This part also involves the data collection, data measurement, data analysis method in order to keep the research validity.

## **Chapter 4 Research Findings**

The fourth chapter is taking SPSS to analyze the collected data and illustrated research findings and concludes the results from the data. The reliability and correlation among the variables are been interpreted as well in this part. The Hypotheses and

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results are been analyzed and discussed in order to ensure whether the hypotheses accept or reject.

**Chapter 5 Conclusion and Suggestions** The fifth chapter is mainly concluded this study and research. In the meantime, this chapter is also proposed some constructive suggestions and recommendation, revealed the limitations of the study for the future or further study.

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## **Chapter 2 Literature Review**

### **2.0 Overview**

This part aims to illustrate the independent variable and dependent variable of the study. The independent variables are e-commerce website design, e-commerce commodity quality, e-commerce logistics efficiency and e-commerce customer service capability; meanwhile, the dependent variable is brand equity in Malaysia. The global perspective and e-commerce websites brand equity theory can prove the four hypotheses about the relationship between the independent variables and dependent variables. Next chapter will research it specifically.

### **2.1 Brand Equity**

There are several kinds of definitions of brand equity since the diversified brand equity theory (Wang and Liu, 2016). As the labor equity theory mentioned that the brand equity consists of series of joint operations by clients and corporates for obtaining more profits and more benefits, which it can bring more competitive advantages for the brand (Chiu, Wang, Fang and Huang, 2014). In addition, as the neoclassical brand equity theory mentioned, the brand equity illustrates the willingness of customers to buy some particular brand products, which reveals brand loyalty of customers, customer preferences, market segments and the user experience (Leek and Christodoulides, 2012).

Brand equity is an intangible asset, which contributes to brand value since it has and reflects the accumulation and development of brand implications, and generates equity to the company and organization (Ramaswamy and Ozacn, 2016). As E-commerce expands exponentially globally, more and more companies are involved in internet related activities (Loubere, 2017). These companies differ from

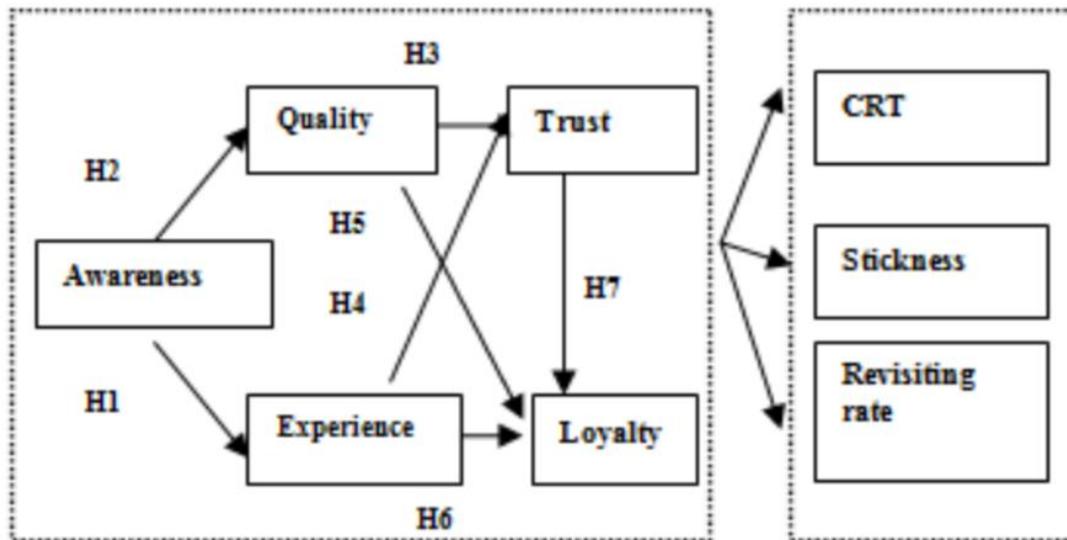
the traditional companies and thus, the need for understanding the nature and type of brand equity will also be different (Molinillo, Liñana-Cabanillas and Anaya-Sánchez, 2018). Consequently, according to Christodoulides, Furrer, Shiu, Abimbola (2006), e-commerce brand equity for internet related companies focuses on website or platform to do marketing penetration in order to gain competitive advantage for business.

Therefore, Internet companies shall pay close attention on the properties and facilities of the websites to get the customer loyalty and present a better perception from the brand value and satisfy customers' needs in order to be able to earn customers' trust and results in E-commerce brand equity (Siadat, Saeednia, Matinvafa and Moghadasi, 2016).

### **2.1.1 Global View on E-Commerce Brand Equity**

#### **E-commerce Brand Equity**

According to other literates and researches (Loubere, 2017; Lee and Leh, 2012; Ma, 2016) of e-shopping behavior, there are two dimensions that E-commerce brand equity and web-market outcomes as showed below in Figure 4, moreover, Chinese e-commerce researchers analyze the relationship between e-commerce website market outcomes and consumer-based brand equity that have mature market and experience related marketing brand equity to e-commerce (Ma, 2016).



**Figure 4. Relationship in both E-commerce website market outcomes and consumer-based E-commerce brand equity (Ma, 2016)**

During the process of value-adding, brand equity has played a critical role, is the basic and fundamental factor related to a brand specially for e-commerce service providers and its websites to be successful, and has to be converted into sales revenue (Civelek and Ertemel, 2019). As the brand equity increasing, the e-commerce consumers perceptions are affected by the brand and purchase intentions to the brand will lead to high volume and the platform can sustainably develop (Cobb-Walgren, Ruble and Donthu, 1995).

### **E-commerce Brand Equity from Consumers' Perspective**

Awareness is a kind of brand equity that known by customers, an e-commerce's awareness is very important than the offline business, since online business commodities cannot give the chance to customers to feel and touch the real product that's why online brand image or equity important (Ma, 2016). Awareness in a certain extent is like a compass and shows the direction for the business marketing activities (Baldauf, Artur, Cravens and Gudrun, 2012).

According to Ma (2016), the brand association is a typical factor that influences the electronic retailing or website, which in terms of two perspectives of website quality and user experience. Especially for online platforms, since this new channel shall enhance the brand marketing and brand equity related to platform quality (Chin et al., 2018).

Perceived quality is a particular attitude of customer towards these online retail websites, it

has always been the critical and important dimension to measure e-commerce brand equity, and this factor is the core component to measure the offline brand equity as well (Kalampokis, Karamanou, Tambouris and Tarabanis, 2016). When the scenario meets to electronic retailing service provider's equity, quality has become the evaluation factor in line with website service quality and commodity quality provided by the e-commerce businesses, and at the same time, the former element needs too many technical support from website business, and the later heavily relies on the logistics efficiency and specific product or commodity or service supplier (Ma, 2016). The quality largely affects the customer loyalty and is the judgment for such kind to product or service (Kalampokis et al., 2016). Therefore, the quality of e-commerce retailing is not only depending on one business unit, but also depending on all other departments' cooperation (Ma, 2016).

Experience gathering all interaction points between consumers and the brand party at another virtual side, is working throughout the whole browsing, purchasing, and post purchasing process, no matter what the service or products provided or what website features (Siadat et al., 2016). Online shopping is the process that can help customers to buy product or service without outing, and help customers to get fun, adventure, curiosity and excitement and so forth (Ma, 2016).

Trust is a factor for assessing the customer confidence during customers online shopping or exchanging activities and Chin et al., (2018) argued that online exchange is the process that presents risks to customers, so that the trust plays an extremely important role for creating loyalty when the risk is high. E-commerce or online retailing is treated as a risky activity due to customer's lack of direct interaction with the brand, and the customers submit sensitive or private information such as delivery address and phone numbers, therefore customer's loyalty is increasingly towards online brand (Siadat et al., 2016). The online shopping is not only to sell products to customers, but also is it a platform and wisely use in order to build relationships with customers to achieving word-of-mouth and stimulating the high level of website awareness (Ma, 2016). Good brand equity e-commerce businesses with good customer satisfaction is generally considered as the loyalty element, and it can result in repeat purchasing or repeat visiting behaviors (Kalampokis et al., 2016).

### **2.1.2 E-commerce Brand Equity in Malaysia**

The emerging of the Internet has created a new channel for business drivers causing the

major companies to reconsider or reposition its mission and brand strategies in e-commerce environment after Malaysia government initiative of adoption e-commerce (Silva et al., 2012). At the same time, the dynamic economy provided foundations for advancements, Malaysia has attracted business sectors to run online business and get the government initiative of Malaysia government to enhance its e-commerce platforms' brand equity during consumers' minds (Chin et al., 2018).

The time to reach the target market has become an important issue for most of companies, especially these e-commerce businesses with competitive life span of services, therefore, the brand value and brand equity have expanded and play a significant effect on the series marketing activities to enhance its brand equity in customers' idea (Baldauf et al., 2012).

During the past ten years, branding and brand equity have climbed to be one of the major critical positions in marketing field, while the traditional marketing field still been a limited position to this phenomenon (Silva, Nikhashemi, Haque, Yasmin and Khatibi, 2012). Even the fact that the brand equity concept has drawn the public attention broadly, B2B brands or B2C brands and industrial markets are still on the road of acceptance (Yasin et al., 2013). Malaysia government took this development opportunity to initiate the e-business model and allocated Malaysian Communications and Multimedia Commission (MCMC) to supervising the e-commerce platform information and the communication with ventures (Chin, 2018).

From the point of brand, there are still existing different forms that draw the public attention through tremendous, sights, information and messages in consumer and marketing, which marketing or branding workers are trying to bring more connection between brands and consumers to retain the brand loyalty (Silva et al., 2012).

The brand equity especially in the B2C markets or e-commerce emerging Malaysia market is able to give extreme interests and willingness to intended purchasers through price premium for particular e-commerce brand (Baldauf et al., 2012). As of Malaysian's e-commerce emerging and segment consolation, Malaysia has high rates of e-commerce use and gained 15.3 million online customers, which it is 50% of the populace and 62% of mobile user shopping on the platforms (Chin et al., 2018).

Big Internet traffic from online users is one of the most influential factors for e-commerce business in Malaysia to expand brand to the open market and gain the market share, and

maintain the brand image from e-commerce platforms as its marketing strategy (Baldauf et al., 2012). The Malaysian top e-commerce business LAZADA was purchased by ALIBABA and started to create strong brand equity in the long-term running view to keep profitability and strongly can compete with its competitors such as ZALORA through the brand equity strategy (Silva et al., 2012).

There are several dimensions of brand equity as brand awareness, brand loyalty and brand associations, as Keller (2003) argued that the brand power in customers' mind and the user experience about the brand deep into customers' heart, since discusses the customer based brand equity as the part of brand knowledge on customers' response, which it can apply these brand knowledge to Malaysia e-commerce brand equity. As Esch et al., (2006) stated brand equity model theory stated, brand equity consists of two parts that are brand awareness and brand image. The first marketing priority is to establish strong brands and achieve more customer volume, increase website conversion rate (Chin et al., 2018) and retain customers, enhance the power of brand, maintain the loyal customers, optimize the e-commerce platform search algorithms and personalized information to customer that techniques has deployed into Malaysia already since 2016 (Lee and Leh, 2012).

## **2.2 Factors Influencing E-Commerce Brand Equity**

According to the summarization of global and local scholars in the factors of the e-commerce website brand equity, it can be revealed that the brand equity should be studied primarily in terms of below perspectives. For instance, consumers, companies and user experience (Romaniuk and Nenycz-Thiel, 2013).

### **2.2.1 E-commerce Website Design**

E-commerce website design would explain a sizable part of the conversion rate from e-commerce visitors to purchasers (McDowell, Wilson and Jrkile, 2016). Maximizing sales and user satisfaction, and improve the website traffic are important factors contributing to the website design (Romaniuk and Nenycz-Thiel, 2013). Meanwhile, approximately 96% of e-commerce website visitors end visiting without customer purchases since the website surface and other related services (McDowell et al., 2016). Website interactivity and consistent exposure on user will affect the user experience

(Al-Shamaileh and Sutcliffe, 2012). Website design refers to the information of product or service delivered through the e-commerce website is accurate (Cyr, 2014). The good design of the website allows consumers to customize own experiences among the process of online shopping (Lam and Shankar, 2014).

As de Matos and Rossi (2008) stated that study on an e-retailer website that the quality of website design would directly affect word of mouth. After the first browsing the website and placing an order to buy product(s) with effective user experience, it indirectly affected by the website design and will increase the website awareness and enhance the website exposure, and help websites to earn the brand loyalty (Kumaran and Kanan, 2015). The good e-commerce website design can improve the online shopping experience and increase the visiting efficiency, which consumers can search and get products on a timely manner that is a momentum factor affects the consumers' loyalty (De and Rossi, 2008).

In light of such information, e-commerce websites businesses should pay more attention to understand the website design and website quality dimensions properly (Gumus and Bal, 2016). The websites' evaluation from visitors indirectly brings effects to website awareness, and the good evaluation from visitors secondarily enhances brand equity (Choi, Yoon and Lacey, 2013). Therefore, e-commerce business ought to be able to develop long-term strategies integrated website design and quality to advance the e-commerce platform and give memorable experiences to visitors (Gumus and Bal, 2016).

### **2.2.2 E-commerce Commodity Quality**

According to Davidavičienė and Tolvaišas (2011), quality assurance of commodity plays an important role for affecting the customer behaviors. Commodity quality and information means that the assurance and format of service and products that given by the websites and make sure the accuracy (Dong, Wu and Li, 2016). When the consumers purchased the product from the e-commerce website, the subsequent process is the user experience for the commodity quality (Choi, Yoon and Lacey, 2013). In addition, the higher quality of product or service provided by the e-commerce website, the higher confidence consumers do have for the websites, moreover, the higher purchase intention and consumer preference will be generated (Yu, Lin and Chen, 2013).

The products quality, risk and value from the e-commerce platform can have strong influence on customer loyalty and repurchase on these platforms (Lin and Wang, 2015).

As most of the public know that the biggest disadvantage for online shopping is that the consumers can't be exposed to the physical commodities when consumers are visiting, which means that the visitors browsing the e-commerce websites cannot touch and feel the real and true products and the important evaluation factors for interfering the final purchase decision are the commodity details information and the commodity quality comments from other buyers (Davidavičienė and Tolvaišas, 2011). The other same buyers' comments and the familiarity of the same products to consumers will bring the confidence to consumers during online shopping process, which it could affect the consumers' intention and purchasing intention (Zauner, Koller and Fink, 2012).

For how to improve the confidence, maintain the loyalty and improve the purchasing intention is the e-commerce businesses making sure that increasing the commercial information on the websites to assist consumers and visitors to acquire more details information and fully expose the commodity quality (Laroche, Habibi and Richard, 2013). The commodity quality as a significant factor to influence the conversion rate that means converts potential visitors to final buyers (Siadat et al., 2016).

### **2.2.3 E-commerce Logistics Efficiency**

Logistics is defined as a part of supply chain management that included order command, implements, and controls the efficient, and effective flow of goods processing to achieve customers' requirements and distribute the item to named consignee and it is a core process as well during the online shopping process (Wang and Zhang, 2016).

Another part is the order processing capability, is the factor influencing the online shopping decision, which mainly involved online ordering, payment, logistics and distribution provided by e-commerce business operators (Zauner et al., 2012). From the perspective of consumers and visitors, the order processing capability reveals that this e-commerce websites can fulfill its commitments on time and high-efficiently (Li and Bolz, 2017). Supposing that e-commerce websites failed to reach the expectations of customer or the orders distributed to consumers that did not same or match with the order system products, it will directly influence the confidence of consumers, brand image of

the website, the expression of the website, and moreover, it shall affect the brand loyalty of websites in consumers' minds (Lim, Jin, and Srail, 2018).

Order processing or order fulfillment is a capability that can in a certain extent affect the brand equity and mostly result in a lower brand equity happened in this circle (Lee and Mun, 2015). Order fulfillment capability is an integrated entity for online shopping process and it is across two different interfaces between the network environment and the real world, can make consumers to get a three-dimensional online shopping experience and the payment (Li and Bolz, 2017).

At the same time, order fulfillment capability can achieve customers' performance during the process of buying and selling (Chin et al., 2018), which indirectly enhance the logistics delivering.

In addition, once the order is not matched and paralleled with purchasers' initial order, it will case the dissatisfaction from the purchaser, which it will result in loss of trust on the e-commerce websites, no longer the websites how show friendly, even it will result in the bad word-of-mouth and understanding of the websites efficiency around this particular friends circle. According to Thomas (2017), the higher efficiency of logistics transportation, the more effective results will be generated to create effective brand image and brand awareness of e-commerce providers, which improving the brand equity of particular e-commerce platform (Jensen, Walsh, Cobbs and Turner, 2015).

#### **2.2.4 E-commerce Customer Service Capability**

Customer service capability is the ability that integrates a series processes among pre-sales service provided during earlier visiting, browsing and enquiry stage by the website, on-purchase service provided during the intended ordering stage to solve the product details enquiry, and after-sales service provided to solve customers' post-purchase stage (Lam and Shankar, 2014). It is able to reduce the losing customers' risk of online shopping and enhance the conversion rate during search prime time (Wang and Zhang, 2016).

According to the study (Wu and Wu, 2015) of China Electronic Commerce Research Center, B2C websites design and search logic algorithm is mostly not clear enough, which it is difficult for customers to find the ideal and desired products as soon as

possible, therefore, the role of customer service has emerged to public eyes on the e-commerce websites to assist visitors or potential customers to understand, explain and resolve problems within online shopping process (Viktoria and Kenning, 2014). The study on failure of majority online shopping transactions is caused by the lack of customer service capability or insufficient customer service knowledge, which reveals that customer's service capability, is a complement component for the brand knowledge, and on the other side, the customer service plays an critical role to help e-commerce website business or company to maximize online transactions (Yu et al., 2013).

As above mentioned, the most online transaction failure of online shopping behavior is the reason of customer service capabilities (Viktoria and Kenning, 2014), and take an assumption of customer that is interested in an item product and wants to learn more details and information about the specific product, but the website cannot solve the customers concerns in a timely manner, in the end, it results in the loss of buying (Wang and Zhang, 2016).

The contrary statement, the successful customer service capability is able to increase the conversion rate (from potential buyer to actual buyer), and make sales performance grow, and leave an good expression to customers, which can successfully retain the customer for next shopping, indirectly enhance brand loyalty and resolve the concerns and issues from brand equity (Yu et al., 2013).

Therefore, in terms of e-commerce customer service capability, these factors of conversion rate, customer service behavior, solving problems efficiency and so on are will contribute to e-commerce providers' brand equity (Chin et al., 2018).

### **2.3 Gaps in The Literature**

As the existing marketing literature argues that there are many researches (Kurnia et al., 2015; Laudon and Traver, 2018; Lee and Wong, 2016) in customer and business cooperation field, these views are in line with some current modern approaches (Davicik, Da and Hair, 2015) that suggest that taking the views or opinions from stakeholders or relative interest parties of brand equity. This work argues that important components of Esch's (2006) brand equity theory is brand knowledge in terms of brand image and brand awareness, brand relationship in terms of brand satisfaction, brand trust and brand

attachment, and the behavior outcomes in terms of current purchase and future purchase, which having narrow and limited perspectives or resources that applying in the context location of Malaysia.

Literature takes the different perspectives from brand and brand equity to illustrate the e-commerce websites brand equity that applying into Malaysia (Kalampokis et al., 2016). As this context study on e-commerce website design, e-commerce commodity quality, e-commerce logistics efficiency, and e-commerce customer service capability, and in line with the Esch et al., (2006) theory model that strongly suggest the brand image, brand awareness, brand satisfaction, brand trust, brand attachment and purchase intentions are able to support the study that are related to the independent variables.

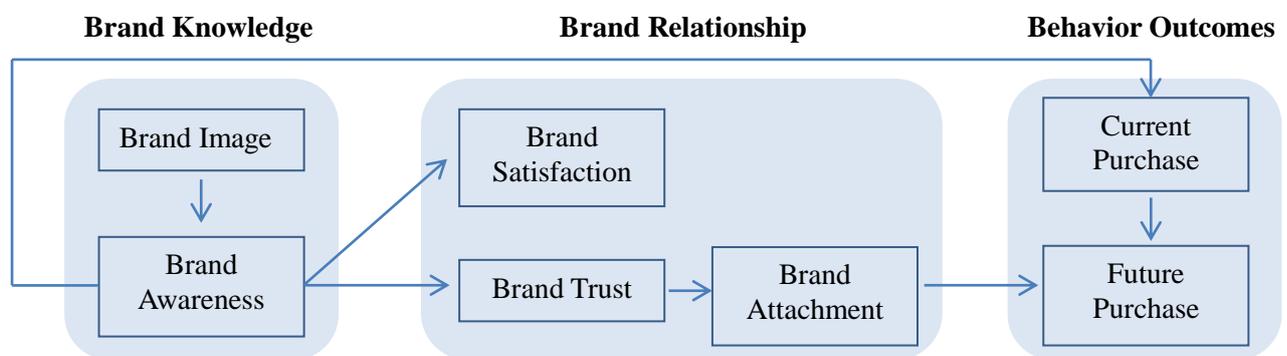
One of the major differences of this research is that the existing literature remains on a stage of conceptualization, this study steps further and illustrates detailed brand image, brand awareness, brand satisfaction, brand trust, brand attachment and purchase intentions from brand equity theory (Tirunillai and Tellins, 2012).

According to the literature reviews, most of perspectives are focusing on brand satisfaction in a certain context expresses the opinions and feelings of customers on a particular product or services, brand image reveals the positive or negative position of customer to a specific brand when consumers purchasing, which it can affect the purchase intention or future consumption (Kalampokis et al., 2016), which these views are not directly point to e-commerce industry, however it can support the study. There is a number of researches (Christodoulides, 2006; Davick et al., 2015) have been conducted to exam and evaluate the brand equity, however, there is not much researches been done to apply brand equities to Malaysian e-commerce brands (Lee and Leh, 2012).

## **2.4 Brand Equity Theory**

In light of foreign literatures (Esch et al., 2006; Tirunillai and Tellins, 2012), these authors concluded the brand equity theories based on marketing reality to implement research and finding that compositions of brand equity and the factors related to e-commerce brand equity. The success of e-commerce depends on customer loyalty to e-commerce retailers that means it is necessary for e-commerce platform providers to maintain effective long-term relationship with consumers (Jensen et al., 2015).

When brand equity model of Keller specializes on the brand equity view of brand knowledge, there is a recent research (Tirunillai and Tellins, 2012) illustrates that building brand equity is insufficient from perspective of brand knowledge alone. More specifically, according to Esch et al., (2006) argument, brand knowledge is influencing customers' response through the brand relationship dimensions. This part of theory is able to support the brand relationship of brand trust and brand satisfaction for the websites as this essay mentioned in the factors influencing part. Brand relationship discusses relationships between consumers and e-commerce businesses, which means customers build the relationship with the websites (brand party) in the same manner the e-commerce website builds relationships with consumers (Kalampokis et al., 2016). Esch et al. (2006) illustrated the model as below figure shows.



**Figure 5: Esch's Model for Brand Equity (Esch et. al., 2006)**

Brand satisfaction as part of brand relationship in this theory is the good evaluation factor for e-commerce business to measure the customer satisfaction on website design, commodity quality, logistics efficiency and customer services, and inversely (Kalampokis et al., 2016). As customer service capability part, this theory model is able to prove that service quality, purchase intention, and brand image, and complaint are supported by this theory (Tu, Wang and Chang, 2012).

At the same time, brand trust refers to outcome of consumers' relationship with brand and a security feeling comes from the brand, which it proves this essay commodity quality part discussion on e-commerce website brand equity (Esch et al., 2006). Brand trust brings many evidences about the impact on consumers' loyalty to a brand and affects the repurchase intentions as stated in the customer service capability part (Tu et al., 2012).

Brand attachment is connected to factors influencing part that is measure the quality of

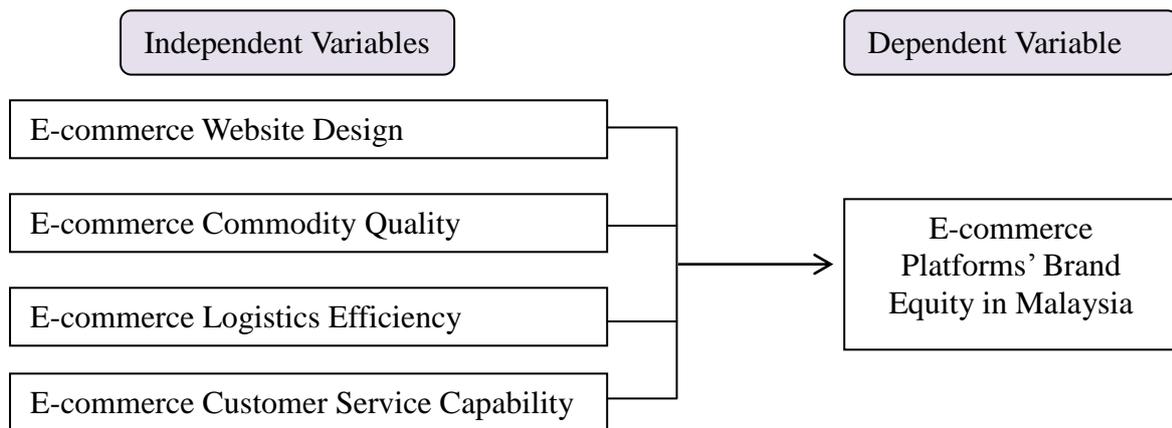
service of a brand (Kalampokis et al., 2016). When the customer retaining rate is higher, it indirectly reflects the website design, commodity quality, logistics, and customer service capability are meeting the customers' requirements and the actual and ideal order will be affected, therefore, the brand attachment is to measure the intensity of the customers' loyalty to the brand (Esch et al., 2006).

Current and future purchase reflects the behaviors performed by the customers on purchase intention of the brand, which it proves the argument of customer service capability part (Kalampokis et al., 2016). The behavior outcomes refer to current and future purchase, and it can examine the brand image of e-commerce websites and brand awareness the website (Tu et al., 2012).

According to Esch et al., (2006) brand equity model could support the study on the e-commerce brand equity, at the same time, specifically in terms of brand image, brand awareness, brand satisfaction, brand trust and purchase intention to support the e-commerce platforms brand equity. The model mentioned brand knowledge of brand image and brand awareness are the basic concepts for Malaysia e-commerce business strategies adopting (Chin et al., 2018). Brand image has been considered as an important element of e-commerce platforms brand equity, which means influence consumers decisions (Jensen et al., 2015). Consumers are willing to share the platforms to others, which is a kind of brand loyalty and brand trust behavior that match Esch et al., (2006) brand equity model.

## **2.5 Conceptual Framework**

This is the framework of this study considering the relationship between independent variables and dependent variables. There are four independent variables would be researched and illustrated as e-commerce website design, e-commerce commodity quality, e-commerce logistics efficiency and e-commerce customer service capability (Chin et al., 2018; Esch et al., 2006).



**Figure 6: Conceptual Framework**

## 2.6 Hypotheses

H<sub>1</sub>: E-commerce Website Design has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

H<sub>2</sub>: E-commerce Commodity Quality has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

H<sub>3</sub>: E-commerce Logistics Efficiency has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

H<sub>4</sub>: E-commerce Customer Service Capability has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

## 2.7 Conclusion

After analyzing the independent variables and dependent variable of this research and literature review, it still needs further research on the four hypotheses at the next chapter. The brand equity theory is suitable theory for this e-commerce brand equity study. Brand equity theory (Esch et al., 2006) quantifies the consumers' views to measure the e-commerce brand knowledge, brand relationship and behaviors.

## **Chapter 3 Research Methodology**

### **3.0 Overview**

The main objective of this chapter is expected to illustrate the parameters of the research design, questionnaire design, and details of the measurement table. After then, it will state the definition of sampling population and sampling design. Lastly, the data collection and data source would explain and briefed about the following data analysis methods that implemented in this study.

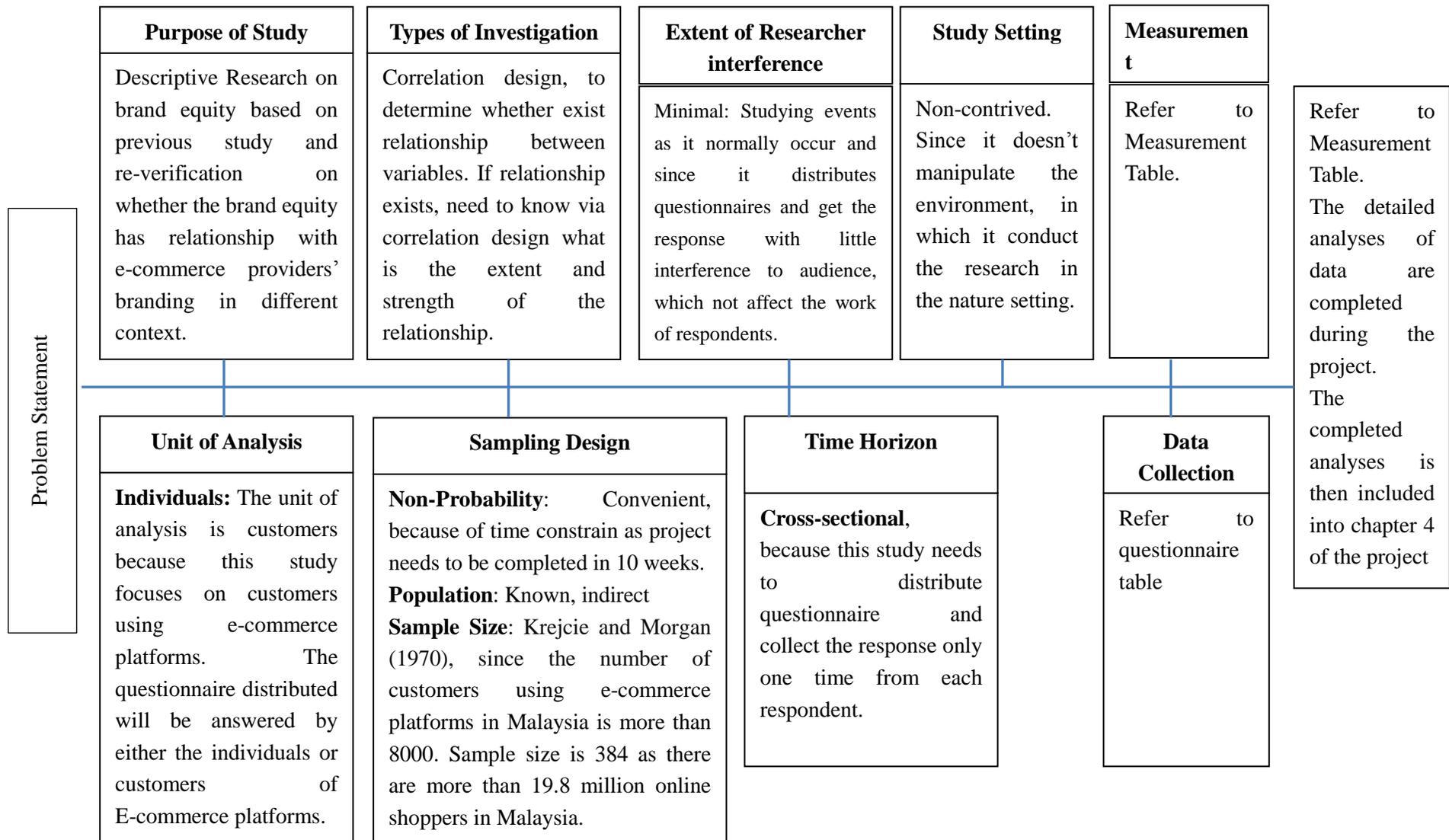
### **3.1 Research Design**

The mainly target is aimed to study the factors influence e-commerce platforms' brand equity in Malaysia. For this part, research design can clearly direct and guide researchers to implement research and ensure its on track (Lane, 2018). Research design will mainly illustrated the data collection, measurement of data, descriptive analysis and other different necessary tests as well as questionnaire design.

The research approach for this study is adopted descriptive and explanatory as the methods implemented. According to the conceptual frame to construct associations between dependent variable and independent variables and predict relationships among variables. According to implement hypothesis test, to evaluate the determined sample of population and to ensure the probability is true. The following questionnaires will distribute through online format and paper format.

The details and summary of research design are as followed table.

Table 4 Details and Summary of Research Design



### **3.2 Study Population**

According to Malaysian Communications and Multimedia Commission (MCMC) report shows that the age group from 20 to 29 has been the major growing force in the process of Internet process. The second growing group is from 30 to 39 has also contributed to the increase of online shoppers. According to the Malaysian Communications and Multimedia Commission (MCMC) research indicated that the average age of non-online users was 58.1 years old, as compared to 2016 increased from 53.9 years old.

Therefore, this study is mainly research the group of young and middle-aged people that ranges from 20 to 50 years since these group of people have the concept to accept e-commerce consumption and have ability to buy online products no matter in terms of consumption level, income and revenue level, which indicates that e-commerce platform shall focus mainly on these consumers to retain and keep them to achieve profitable target, which can allow e-commerce websites providers sustainable.

### **3.3 Unit of Analysis**

The unit of analysis is the entity that constructs what is being discussed and analyzed during a certain and specific study, which refers to the population studied such as individuals, organizations or groups and as well as the data collected for the respective units (Babbie, 2013).

In this study, unit of analysis is designated and set as individuals that age from 18 to 40 years old in Malaysia. Why select front mentioned individuals as the unit of analysis, since this kind of population has reported and researched by Malaysian Communications and Multimedia Commission (MCMC) and whom have huge potential for growth.

### **3.4 Sampling Design**

Sampling design is a critical component for business research, and is the process of determining suitable amount of studied population (Hansen, Hurwitz and Madow, 1993). Prior to data collection, sample design shall be planned and specific number of sample shall be figure out from studied population and the researchers should adopt techniques in sample selection to assure the data and sample is reliable and appropriate for the needs of study (Salant and Dillman, 1995).

Approximate number of population in Malaysia is 31.62 million during the year of 2017 (World Bank, 2017). In addition, the online shopping consumers is about to reach 19.8 million (Statista, 2018). In order to research this huge group, data will have inaccurate situation if sample size and sample not controlled.

In this study, sample should be focus on online shoppers and live in Malaysia, to make sure the data is more appropriate and close to real situation that requires the sample be as many as possible.

The confidence level indicates the theoretical ability of the analysis to generate how accurate intervals. The confidence level of this study is set as 95% and the confidence interval of this study is 5%. In the meantime, according to Krejcie and Morgan (1970) sample size determination requirement and calculated the sample size can be determined as 384. Before data running and analysis, pilot test shall be conducted to evaluate the questionnaire is reliable or not. In another words, pilot test is a preliminary study and small scale trial prior to full-scale project to evaluate the feasibility.

### **3.5 Data Collection**

Data was collected through self-designed questionnaires that have paper format and online format. Due to time constrains, paper questionnaires are controllable and

distributed to person in the city center. In the meantime, the online questionnaires are indirectly distributed when I post on social media websites, forward to friends in Malaysia. The main instrument part of the questionnaire is taking 5 Likert scale, from 1 to 5, which means 1 represents strongly disagree to 5 represents strongly agree. All data collected back will type into SPSS for further tests and analysis.

### **3.6 Measurement Strategy**

For this study, the questionnaire was designed by author and based on nominal scale and ordinal scale. Since the brand equity is a general and abstract concept, it does not have a numerical standard to measure and exam it. Therefore, in this study, 4 brand related independent variables involved to quantify the brand equity and 5 Likert Scale to measure the dependent variables and independent variables. The 5-point Likert Scale allows questionnaire participants to rank the level of each question more specific in accordance with their real perception and experience.

Furthermore, IBM SPSS Statistics software is used for the data analysis, which is a most proper and suitable interactive statistical analysis instrument for this study to implement different tests and analysis for data collected.

#### **3.6.1 Pilot Test**

According to the research of Thabane, Ma, Chu, Cheng, Ismaila, Rios, Robson, Thabane, Giangregorio and Goldsmith (2010), they introduced that the pilot test is preliminary preparation for the further research that has to be executed prior to formal data collection. Pilot test is a small scale versions for trial, which so call feasibility test as well. The former studies indicate that pilot test can be treated as a way of assure research instruction and assist researchers to find out and figure out potential errors, recessive failures, and incorrect procedures designed during the questionnaire.

The basic and fundamental purpose of pilot test is to establish a general image of

validity and reliability. According to Thabane et al., (2010) and Krejcie and Morgan (1970) sample size determination requirement, 50 samples or above would be a proper number for pilot test in this survey research, which can support to identify errors or failures in data and questionnaires.

### 3.6.2 Reliability Test

Gulliksen (2013) explained that there are two normal elements for reliability that indicate the measurement accuracy and stability over time and another is the internal consistency of all items have being measured. Reliability test for rating scale questionnaires is a critical step when exploratory factor analysis applied to assure questionnaire validate and outcomes or results stable and consistent (Murphy and Davidshofer, 2005). During the common statistical research, it is pretty normal to apply Cronbach's alpha to examine the reliability and reveal the level of measurement consistency. Cronbach's alpha scales from 0 to 1, reveals higher reliability if the rating is higher; otherwise if the rating is lower and closer to 0, it reveals the lower reliability. The Cronbach's alpha score explanation and interpretation shows as below table.

Table 5 Cronbach's alpha Measurement Description Rule

Cronbach's alpha	Internal Consistency
$\alpha > 0.9$	Excellent
$0.8 < \alpha < 0.9$	Good
$0.7 < \alpha < 0.8$	Acceptable
$0.6 < \alpha < 0.7$	Questionable
$0.5 < \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

(Source: George and Mallery, 2011)

### **3.6.3 Descriptive Statistics**

The descriptive statistics is a summary statistics that provide simple summaries from the related sample and provide observations that have been made (Babbie, 2013). All descriptive statistics are measuring the central tendency or variability, which always illustrate by tables, graphs and description of discussion to provide interpretation to people to better understand the meaning of collected data.

Measures of central tendency allow people to understand the data distribution in a center position. The most common ways of analyzing the frequency describes through mean, median or mode to analyze data set. Measures of variability allows people to understand the spread-out distribution for a data set, which describe how the data is distributed within the set, describe the shape, spread, variance, absolute deviation and so forth.

### **3.6.4 Factor Analysis**

Factor analysis is to review the factors validity and to determine sampling adequacy (Cooper and Schindler, 2014). In quantitative research, factor analysis has three roles, firstly it can help readers to understand variables structure, secondly, to measure questionnaires underlying variable and thirdly, to assure the data to be manageable.

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is identifying the proportion of variance among variables that may be caused by underlying factors. The value of KMO is higher (close to 1.0), the factor analysis might be more useful. On the contrary, if the value is less than 0.5, the factor analysis probably might not be very useful. If values of KMO are from 0.8 to 1, it reveals the sampling is adequate. If values of KMO are less than 0.6, it reveals the sampling is not adequate. If values of KMO are close to 0, it reveals that there are large problems for factor analysis. The rule of thumb in below table will interpret the statistic.

Table 6 Rule of Thumb for KMO Results

KMO Value	Results
0.90 < KMO < 1.00	Marvelous
0.80 < KMO < 0.89	Great
0.70 < KMO < 0.79	Middling
0.60 < KMO < 0.69	Mediocre
0.50 < KMO < 0.59	Miserable
0.00 < KMO < 0.49	Unacceptable

(Source: Cerny and Kaiser, 1977)

### 3.7 Design of Questionnaire

In quantitative research methodology, questionnaire design is a critical step, all the subsequent data are generating from the questionnaires. Accurate and appropriate questions are playing an important role to verifying hypotheses and identify problems through questions in related to research industry.

In this study, the questionnaire are designed from three different aspects such as consumer basic information so call demographic information, consumers' online experience, and most importantly dependent variables related questions and independent variables related questions. Questions related to dependent and independent variables are taking Likert rating scale to measure how respondents disagree or agree to the questions from 1 to 5 (1 = strongly disagree to 5 = strongly agree).

The first section of this questionnaire consists of basic demographic information, which mainly survey on the background investigation such as gender, age, income level and education level. The second section is focusing on participants online experience and Internet-access habit investigation such as how long and how often do participants to access internet and so forth. The third section is the major important part during the whole questionnaire. The third part includes the dependent variable questions related to brand equity such as brand image, brand awareness, brand trust and brand loyalty. According to the assumption of conceptual framework, influencing factors related to Malaysia e-commerce brand equity are designed 4 questions for 4

independent variables that are e-commerce website design, e-commerce commodity quality, e-commerce logistics efficiency and e-commerce customer service capability.

Below table is the summary of questionnaire design for each section.

Table 7 Summary of Questionnaire Design

Section	Variable	Items	Source
1	Demographic Profile	4	DeFranzo (2012)-Adapt
2	General Information on E-commerce	6	Lee and Leh, 2012
3 (Dependent Variable)	E-commerce Providers' Brand Equity	8	Ma, 2016 – Adapt
(Independent Variable)	E-commerce Website Design	4	McDowell, Wilson and Jrkile (2016) -Adapt; Gumus and Bal (2016)- Adapt
	E-commerce Commodity Quality	4	Yu, Lin and Chen (2013) - Adapt; Siadat et al., (2016)- Adapt.
	E-commerce Logistics Efficiency	4	Lim, Jin, and Srai (2018)- Adopt; Li and Bolz, 2017- Adapt
	E-commerce Customer Service Capability	4	Lam and Shankar (2014) - Adapt; Yu et al., 2013 – Adapt

### 3.7.1 The Questions for Dependent Variable

Since brand equity refers to the value of brand and an abstract concept for marketing research, and combining the Esch et al.(2006) model for brand equity, to design 2 questions for each factor and total 8 questions for dependent variable of brand equity. 8 questions are designed in related to brand awareness, brand image, brand trust and brand loyalty with 5 Likert Scale to measure the answers. The specific questions are

as below:

Table 8 Questions for Dependent Variable

<b>Brand Awareness</b>	Response Rate				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
11.1 I can identify the online website from others.					
11.2 I can recall the online website and its features.					
<b>Brand Image</b>	Response Rate				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
12.1 I trust the online website and its services.					
12.2 I have good impression on this website.					
<b>Brand Trust</b>	Response Rate				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
13.1 I trust the website would not leak my privacy to any parties.					
13.2 I trust the credibility and reliability of the website.					
<b>Brand Loyalty</b>	Response Rate				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
14.1 I want to visit and buy next time on this website					
14.2 I want to recommend and share the website to other people					

### 3.7.2 Questions for Independent Variables

In this study, there are four independent variables and designed 4 questions for each variable with total 16 questions that related to e-commerce website design, e-commerce commodity quality, e-commerce logistics efficiency and e-commerce customer service capability. This part is same with dependent variable taking 5 likert

scale for respondents to measure their answers. The specific questions are as below table shown:

Table 9 Questions for independent Variables

<b>E-commerce Website Design</b>	Response Rate				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
15.1 The website layout is my favorite and preferred online shopping site.					
15.2 The loading speed will decide my using willingness.					
15.3 The website interactive design (Query order) is meeting my needs.					
15.4 The website design can attract me from other shopping websites.					
<b>E-commerce Commodity Quality</b>	Response Rate				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
16.1 The quality of products received is same as website described.					
16.2 The website has feedback and rating system for products quality.					
16.3 The website products have certification or verification (Quality Control).					
16.4 The products quality of the website can attract me from other shopping websites.					
<b>E-commerce Logistics Efficiency</b>	Response Rate				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
17.1 The website can deliver my products timely.					
17.2 My parcel or package received without damage or broken.					
17.3 The logistics for purchase return is convenient.					
17.4 The logistics efficiency can attract me from other shopping websites.					

<b>E-commerce Customer Service Capability</b>	<b>Response Rate</b>				
	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
18.1 The website customer service can answer my questions and enquiries timely					
18.2 The website customer service can solve my questions satisfactorily.					
18.3 The website customer service is always showing good attitude and qualified communication capability.					
18.4 The customer service can decide my next shopping or not.					

## Chapter 4 Research Findings

### 4.0 Overview

This chapter is mainly focused on the research analysis, and prior to research analysis, it has a series of preliminary tests executed prior to analyze the full set of data to assure the research on the track of accuracy and validity. Demographic details of respondents would be analyzed in this part as well. Furthermore, analyze the results of data generated from SPSS and hypotheses proposed would be tested to figure out the relationship between dependent variable of Malaysia e-commerce brand equity and independent variables that are e-commerce website design, e-commerce commodity quality, e-commerce logistics efficiency and e-commerce customer service capability.

### 4.1 Pilot Test

Pilot test is a preliminary preparation and small-scale test to measure the instrument reliability and feasibility as mentioned in chapter 3. The first step was distributed 50 instruments and collected 50 samples, however, there is one answer within the samples was not an online shoppers, which means this sample treated as invalid. Therefore, reliability test for the 49 samples was executed to check the instrument questions. All data typed into SPSS and generated results for instrument of dependent variable and independent variables as below table shown.

#### 4.1.1 Factor Analysis of Pilot Test

Pilot test of all dependent and independent items are all tested, that results shown as below.

Table 10 Factor Analysis for Dependent and Independent Variables

Items	Rotated Component Matrix	Communalities after Extraction
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	1	2	3	4	5	6
Q11.1		.785				.757
Q11.2		.689	.522			.837
Q12.1		.741				.833
Q12.2		.714				.817
Q13.1		.704				.775
Q13.2	.553	.693				.863
Q14.1	.822					.778
Q14.2	.676					.771
Q15.1	.684					.745
Q15.2	.562					.788
Q15.3					.752	.753
Q15.4	.503		.562			.817
Q16.1			.710			.726
Q16.2			.478		.489	.782
Q16.3					.852	.799
Q16.4	.697		.523			.871
Q17.1	.691					.655
Q17.2						.745
Q17.3						.822
Q17.4			.768			.778
Q18.1				.806		.855
Q18.2				.832		.876
Q18.3				.477		.688
Q18.4				.556		.695

Note: Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.

Table 11 KMO and Bartlett's Test

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.847
Bartlett's Test of Sphericity	Approx. Chi-Square	916.445
	df	276
	Sig.	.000

As above table illustrated, the KMO value of all variables is 0.847, which considered the samples are adequate and factor analysis is useful. At the same time, Bartlett's Test P-value (Sig.) is 0.00 less than 0.05 as well. On the other hand, all values shown in communalities column are greater than 0.50.

Therefore, factor analysis for all variables shows that all test values excel the accepted

criteria.

#### 4.1.2 Reliability Test of Pilot Test

After validating through factor analysis, Reliability Test would be executed to measure accuracy and stability and assure the internal consistency of all items. Results of reliability test for all variables as shown below.

Table 12 Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.943	24

Table 13 Reliability Test for All Variables

Variables	Items	Cronbach's Alpha
Brand Awareness	Q11.1	.909
	Q11.2	
Brand Image	Q12.1	.899
	Q12.2	
Brand Trust	Q13.1	.910
	Q13.2	
Brand Loyalty	Q14.1	.906
	Q14.2	
E-commerce Website Design (IV)	Q15.1	.905
	Q15.2	
	Q15.3	
	Q15.4	
E-commerce Commodity Quality (IV)	Q16.1	.907
	Q16.2	
	Q16.3	
	Q16.4	
E-commerce Logistics Efficiency (IV)	Q17.1	.915
	Q17.2	
	Q17.3	
	Q17.4	
E-commerce Customer Service Capability (IV)	Q18.1	.907
	Q18.2	
	Q18.3	

Based on the 24 items reliability test, the value of Cronbach's alpha is 0.943, which considered as excellent internal consistency. Furthermore, the individual questions for all variables are all greater than 0.70. Thus, based on the results can assume that the instrument is reliable and appropriate for further full-scale data collection.

#### 4.2 Descriptive Statistics

The instrument of questionnaire distributed online and physical face to face in Malaysia networks. A total of 500 questionnaires distributed and collected back of 402 questionnaires before April 12<sup>th</sup> and there was 1 questionnaire that did not meet the prerequisite question. Therefore, a total of 401 results are useful for next step analysis.

The general demographic information for all participants was shown below table.

Table 14 Demographic Information of All Respondents

Variable	Item	Frequency	Valid Percent
Gender	Male	158	39.4%
	Female	243	60.6%
Age	Below 20	83	20.7%
	20-29	266	66.3%
	30-39	46	11.5%
	40-49	6	1.5%
Education	High School	6	1.5%
	Associate/Diploma	82	20.4%
	Bachelor/Degree	197	49.1%
	Master or Above	116	28.9%
Income	Less than 3000	148	36.9%
	3001-5000	134	33.4%
	5001-7000	68	17.0%
	7001-10000	51	12.7%

According to the results above from SPSS, there are 243 female respondents participated this survey and takes 60.6% of total results, which is greatly more than male participants of 158 occupied 39.4%.

In terms of age group, the majority of participants are aged in 20-29 years old that occupied 66.3%. The second major group is below 20 that takes 83 participants and occupied 20.7%. However, the main targets of this study are from 20 to 50 years, thus, there are 318 participants being the research people.

In view of educational level, the number of high school respondents is only 6 people. Diploma holders are 82 that occupied 20.4%. Degree or Bachelor holders are the major proportion of 197 respondents, occupied 49.1% of total respondents. The second major proportion of respondents is Master or above holders, 116 numbers occupied 28.9% of total.

In view of income level, the monthly income of all respondents is majorly focus on less than 3,000 ringgit per month, takes 148 respondents occupied 36.9%. The second major income group is from 3001 to 5000, takes 134 respondents that occupied 33.4% which slightly lower than former income level. As the income growing, the proportion is tending decreasing of respondents such as group of 5001 -7000 and 7001-10000 that is respectively takes 68 and 51 respondents.

On account of basic demographic data, the instrument is questioned e-commerce online shopping behavior survey as well. This kind of online consumer preference and behavior would be shown as below table.

Table 15 Online Shopping Behavior of Respondents

Variable	Item	Frequency	Valid Percent
Years of Using Internet	Less than 3 years	10	2.5%
	4-5 years	67	16.7%
	6-7 years	147	36.7%
	8-9 years	100	24.9%
	more than 10 years	77	19.2%
Weekly Visiting Time on E-commerce Websites	Less than 3 hours	210	52.4%
	4-5 hours	127	31.7%
	6-7 hours	36	9.0%
	8-9 hours	18	4.5%

	more than 10 hours	10	2.5%
Yearly Consumption	Less than 1000 RM	104	25.9%
	1001-2000 RM	148	36.9%
	2001-3000 RM	98	24.4%
	3001-4000 RM	16	4.0%
	more than 4001 RM	35	8.7%
Products Bought	Groceries	233	58.10%
	Digital	174	43.40%
	Top-up	252	62.80%
	Clothing	318	79.30%
	Cosmetics	179	44.60%
	Furniture	49	12.20%
	others	65	16.20%
Products Wish to Buy	Groceries	252	62.80%
	Digital	233.0	58.10%
	Top-up	318.0	79.30%
	Clothing	179	44.60%
	Cosmetics	49	12.20%
	Furniture	117	29.20%
	others	87	21.70%

There are some features of online shopping behaviors and preferable habits for 401 respondents in this survey as below:

### **Years of Using Internet**

There are major 36.7% of respondents using internet for more than 6-7 years. 24.9% of respondents are using internet for 8-9 years and next is more than 10 years occupied 19.2%. However, for those who are using internet less than 3 years take 10 respondents, occupied 2.5%. According to this survey, the number of most respondents is having more than 4 years' experience. It indicates that the general Internet infrastructure and Internet coverage rate is higher.

### **Time of Weekly Visiting E-commerce Websites**

There are 210 respondents occupied 52.4% which mean more than half of survey population visiting e-commerce websites less than 3 hours per week. With the

increasing of visiting hours, the number of visitors is becoming lower. It may indicate that the study population in Malaysia does not accustom to visit e-commerce websites.

### **Yearly Consumption**

The number of yearly consumption on e-commerce websites is 148 respondents, the range of this group consumption is 1000-2000 RM. The second large group consumption is less than 1000 RM occupied 25.9%, means 104 respondents in this survey does not purchase online more than 1000 RM.

### **Products Bought**

The top 3 product categories in this survey are clothing category, top-up and tickets and groceries respectively take 318, 252 and 233 respondents.

### **Products Wish to Buy**

The most popular product categories wish to buy in this survey are top-up and tickets, groceries and digital products.

## **4.3 Data Reliability Test**

In this part, all the data collected is sorted since this study majorly research 20-50 age group. Therefore, all the data and results generated from the source of collected data are meeting this research population.

### **4.3.1 Factor Analysis**

As former mentioned, Kaiser-Meyer-Olkin measure of sampling adequacy is aimed to identify the proportion of variance among variables, which measurement from 0 to 1, the more close to 1, the more useful with data. The recommended value of KMO is 0.5 for factor analysis to commence the following analysis. The specific result of factor analysis is as table below shown.

Table 16 Factor Analysis Result

Factor	Item	KMO	Bartlett's Test of Sphericity			Communalities after Extraction	Total Variance Explained (%)					
			Approx. Chi-Square	df	Sig.							
Brand Awareness	Q11.1	.696	631.428	6	.000	.792	67.569%					
	Q11.2					.849						
Brand Image	Q12.1					.791						
	Q12.2					.872						
Brand Trust	Q13.1					.795						
	Q13.2					.842						
Brand Loyalty	Q14.1					.798						
	Q14.2					.816						
E-commerce Website Design (IV)	Q15.1					.692		3373.946	120	.000	.635	76.414%
E-commerce Commodity Quality (IV)	Q15.2										.792	
	Q15.3										.731	
E-commerce Commodity Quality (IV)	Q15.4										.783	
	Q16.1	.796										
E-commerce Commodity Quality (IV)	Q16.2	.778										
	Q16.3	.821										
E-commerce Commodity Quality (IV)	Q16.4	.849										
	Q17.1	.851										
E-commerce Logistics Efficiency (IV)	Q17.2	.803										
	Q17.3	.845										
E-commerce Customer Service Capability (IV)	Q17.4	.663										
	Q18.1	.902										
E-commerce Customer Service Capability (IV)	Q18.2	.908										
	Q18.3	.774										
E-commerce Customer Service Capability (IV)	Q18.4	.804										

Based on above table, to refer that KMO of dependent variable and independent variables are both higher than 0.5, which means the sampling adequacy is acceptable. On the other hand, Bartlett's test of sphericity is aimed to test variables unrelated and unsuitable for further structural detection. As above data result illustrated, the p-value (Sig.) is 0.00 that less than 0.05 and it indicates that the factor analysis would be useful with the data. In the meantime, the communalities after extraction are estimating the variance in each variable accounted for the components. The communalities after extraction in above table are pretty high than the measurement of 0.4, which it

indicates that the extracted components represent each variable in a satisfactory level.

The rotation sum of loadings maintains the cumulative percentage of 67.569% explained by the extracted components for dependent variable of brand equity. The percentage of 76.414% explained variance for independent variables. To sum up, all items tested are available for the next phase of research.

### 4.3.2 Reliability Test

From the reliability test table of below, the Cronbach's alpha of all items is pretty satisfied for the research of 0.939 higher than the measurement of 0.7.

Table 17 Reliability Test Result

Reliability Statistics		
Cronbach's Alpha Based on Standardized		
Cronbach's Alpha	Items	N of Items
.939	.945	24

Table 18 Reliability Test Result for All Items

Variables	Items	Cronbach's Alpha
Brand Awareness	Q11.1	
	Q11.2	
Brand Image	Q12.1	.820
	Q12.2	
Brand Trust	Q13.1	
	Q13.2	
Brand Loyalty	Q14.1	
	Q14.2	
E-commerce Website Design (IV)	Q15.1	.765
	Q15.2	
	Q15.3	
	Q15.4	
E-commerce Commodity Quality (IV)	Q16.1	
	Q16.2	
	Q16.3	
	Q16.4	

E-commerce Logistics	Q17.1
Efficiency	Q17.2
(IV)	Q17.3
	Q17.4
E-commerce Customer	Q18.1
Service Capability	Q18.2
(IV)	Q18.3
	Q18.4

From the above table, it tested the dependent variable and independent variable separately, which results are respectively of 0.820 and 0.765 and higher than the measurement of 0.7. In a nut shell, the data collected and sorted from 20-50 age group is reliable for the following analysis in this study.

#### 4.4 Hypothesis Test

After full-scale questionnaire distribution and a series of tests and analysis, it demonstrates that the data was reliable, accurate and appropriate for the following hypotheses tests. In this part of study, simple linear regression will apply to test former four proposed hypotheses, which means one to one regression will executed for the hypothesis test.

The first hypothesis of this study is as below:

**H<sub>1</sub>:** E-commerce Website Design has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

Table 19 ANOVA of Brand Equity (DV) and Website Design (IV)

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.240	1	24.240	102.305	.000 <sup>b</sup>
	Residual	74.872	316	.237		
	Total	99.112	317			

a. Dependent Variable: Brand Equity

b. Predictors: (Constant), Website Design

Based on the above table, it illustrated that the significance level (P-value) between

dependent variable and independent variable is 0.00 less than 0.05, which gives significant result and indicates that the H1 is acceptable. In this test, p-value is already given the result, in other words, failed to reject the hypotheses and so that to discard f-value result. At the same time, the F-value of H1 is 102.305 that is significant, thus it can indicate that the model explains a significant amount of the variance in brand equity and has predictive capability.

Table 20 Coefficient of Brand Equity (DV) and Website Design (IV)

		Coefficients <sup>a</sup>					Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
Model		B	Std. Error	Beta				
1	(Constant)	1.412	.255		5.546	.000		
	Website Design	.592	.059	.495	10.115	.000	1.000	1.000

a. Dependent Variable: Brand Equity

Based on the above coefficient table, it can see that website design produce a significant result with significance level of 0.00 (P-value) less than 0.05. On the contrary, if the value is higher than 0.05, it indicates the variable of e-commerce website design does not make any contributions to explain the dependent variable of brand equity. The resultant equation from the analysis is:

$$\text{Brand Equity} = 1.412 + 0.592\text{WebsiteDesign}$$

The following is the second hypothesis as below:

**H<sub>2</sub>:** E-commerce Commodity Quality has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

Table 21 ANOVA of Brand Equity (DV) and Commodity Quality (IV)

		ANOVA <sup>a</sup>				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.920	1	19.920	79.489	.000 <sup>b</sup>
	Residual	79.191	316	.251		
	Total	99.112	317			

a. Dependent Variable: Brand Equity

b. Predictors: (Constant), Commodity Quality

Based on the above table, it illustrated that the significance level (P-value) between dependent variable and independent variable is 0.00 less than 0.05, which gives significant result and indicates that the H2 is acceptable. In this test, p-value is already given the result, in other words, failed to reject the hypotheses and so that to discard f-value result. At the same time, the F-value of H2 is 79.489 that is significant, thus it can indicate that the model explains a significant amount of the variance in brand equity and has predictive capability.

Table 22 Coefficient of Brand Equity (DV) and Commodity Quality (IV)

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	1.953	.228		8.561	.000		
	Commodity Quality	.461	.052	.448	8.916	.000	1.000	1.000

a. Dependent Variable: Brand Equity

Based on the above coefficient table, it can see that website design produce a significant result with significance level of 0.00 (P-value) less than 0.05. On the contrary, if the value is higher than 0.05, it indicates the variable of e-commerce commodity quality does not make any contributions to explain the dependent variable of brand equity. The resultant equation from the analysis is:

$$\text{Brand Equity} = 1.953 + 0.461\text{Commodity Quality}$$

The third hypothesis is as below:

**H<sub>3</sub>:** E-commerce Logistics Efficiency has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

Table 23 ANOVA of Brand Equity (DV) and Logistics Efficiency (IV)

ANOVA <sup>a</sup>					
Model	Sum of Squares	df	Mean Square	F	Sig.

1	Regression	12.079	1	12.079	43.857	.000 <sup>b</sup>
	Residual	87.032	316	.275		
	Total	99.112	317			

a. Dependent Variable: Brand Equity

b. Predictors: (Constant), Logistics Efficiency

Based on the above table, it illustrated that the significance level (P-value) between dependent variable and independent variable is 0.00 less than 0.05, which gives significant result and indicates that the H3 is acceptable. In this test, p-value is already given the result, in other words, failed to reject the hypotheses and so that to discard f-value result. At the same time, the F-value of H3 is 43.857 that is significant, thus it can indicate that the model explains a significant amount of the variance in brand equity and has predictive capability.

Table 24 Coefficients of Brand Equity (DV) and Logistics Efficiency (IV)

		Coefficients <sup>a</sup>				Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients		Toleranc	
Model		B	Std. Error	Beta	t	Sig.	e VIF
1	(Constant)	2.890	.166		17.417	.000	
	Logistics Efficiency	.284	.043	.349	6.622	.000	1.000 1.000

a. Dependent Variable: Brand Equity

Based on the above coefficient table, it can see that website design produce a significant result with significance level of 0.00 (P-value) less than 0.05. On the contrary, if the value is higher than 0.05, it indicates the variable of e-commerce commodity quality does not make any contributions to explain the dependent variable of brand equity. The resultant equation from the analysis is:

$$\text{Brand Equity} = 2.890 + 0.284\text{Logistics Efficiency}$$

The fourth hypothesis is as below:

**H<sub>4</sub>:** E-commerce Customer Service Capability has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.

Table 25 ANOVA of Brand Equity (DV) and Customer Service (IV)

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.343	1	19.343	76.628	.000 <sup>b</sup>
	Residual	79.768	316	.252		
	Total	99.112	317			

a. Dependent Variable: Brand Equity

b. Predictors: (Constant), Customer Service

Based on the above table, it illustrated that the significance level (P-value) between dependent variable and independent variable is 0.00 less than 0.05, which gives significant result and indicates that the H4 is acceptable. In this test, p-value is already given the result, in other words, failed to reject the hypotheses and so that to discard f-value result. At the same time, the F-value of H4 is 76.628 that is significant, thus it can indicate that the model explains a significant amount of the variance in brand equity and has predictive capability.

Table 26 Coefficient of Brand Equity (DV) and Customer Service (IV)

Coefficients <sup>a</sup>							
Model		Unstandardized		Standardized		Collinearity	
		Coefficients		Coefficients		Statistics	
		B	Std. Error	Beta	t	Sig.	Toleranc e VIF
1	(Constant)	2.583	.161		16.019	.000	
	Customer Service	.334	.038	.442	8.754	.000	1.000 1.000

a. Dependent Variable: Brand Equity

Based on the above coefficient table, it can see that website design produce a significant result with significance level of 0.00 (P-value) less than 0.05. On the contrary, if the value is higher than 0.05, it indicates the variable of e-commerce commodity quality does not make any contributions to explain the dependent variable of brand equity. The resultant equation from the analysis is:

$$\text{Brand Equity} = 2.583 + 0.334 \text{ Customer Service Capability}$$

## 4.5 Multiple Regression

Beside above one-to-one related comparing, this part would major focus on multiple regression to explain relationship among the independent variables and dependent variable. In this part, the data is sorted respondents as well that aged from 20 -50 years old.

Four independent variables are e-commerce website design, e-commerce commodity quality, e-commerce logistics efficiency and e-commerce customer service capability selected to execute many to one comparison as the multiple regression that results are shown as below tables.

Table 27 Model Summary of Brand Equity (DV) and IVs

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.658 <sup>a</sup>	.433	.426	.42378	1.425

a. Predictors: (Constant), Logistics Efficiency, Website Design, Customer Service, Commodity Quality

b. Dependent Variable: Brand Equity

According to above table illustration, the derived R-Square value is 0.433, which indicating that 43.3% variations in brand equity regarding the e-commerce platforms were explained by the four predictors. The value of R is 0.658, which shows that there is moderate positive relationship among brand equity and four predictors of website design, commodity quality, customer service, and logistics efficiency.

Table 28 ANOVA of Brand Equity (DV) and IVs

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.901	4	10.725	59.721	.000 <sup>b</sup>
	Residual	56.211	313	.180		
	Total	99.112	317			

a. Dependent Variable: Brand Equity

b. Predictors: (Constant), Logistics Efficiency, Website Design, Customer Service, Commodity Quality

Based on the above table, it illustrated that the significance level (P-value) between dependent variable and independent variable is 0.00 less than 0.05, which gives indicates that the result is significant. In this test, p-value is already given the result, in other words, failed to reject the hypotheses and so that to discard f-value result. At the same time, the F-value of 59.712 that is significant, thus it can indicate that the model explains a significant amount of the variance in brand equity and has predictive capability.

Table 29 Coefficients of Brand Equity (DV) and IVs

		Coefficients <sup>a</sup>						
		Unstandardized		Standardized		Collinearity		
		Coefficients		Coefficients		Statistics		
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.066	.269		-.246	.806		
	Customer Service	.169	.040	.224	4.272	.000	.661	1.512
	Website Design	.551	.069	.460	8.014	.000	.549	1.821
	Commodity Quality	.014	.064	.014	.226	.822	.467	2.140
	Logistics Efficiency	.234	.039	.287	6.032	.000	.802	1.247

a. Dependent Variable: Brand Equity

Based on the above coefficient table, it can see that website design produce a significant result with significance level of 0.00 (P-value) less than 0.05, except e-commerce commodity quality that significance level of 0.822 (P-value) greater than 0.05. The value is higher than 0.05, it indicates the variable of e-commerce commodity quality does not make any contributions to explain the dependent variable of brand equity. Since this is multiple regression, multicollinearity statistics value shall take into consideration as well. Multicollinearity VIF values of all independent variables are not exceeding 10, which indicating that dependent variable does not exist multicollinearity with independent variables.

From the R-square to conclude that, multiple regression can collectively explain and

give better information about the brand equity. The resultant equation from the analysis is:

$$\text{Brand Equity} = -0.066 + 0.169 \text{ Customer Service Capability} + 0.551 \text{ Website Design} + 0.234 \text{ Logistics Efficiency}$$

#### 4.6 Correlation Test

After regression analysis, this study also executed correlation test to check the correlation of variables.

Table 30 Pearson Correlations among All Variables

		Website Design	Commodity Quality	Logistics Efficiency	Customer Service	Brand Equity
Website Design	Pearson Correlation	1	-	-	-	-
Commodity Quality	Pearson Correlation	.654**	1	-	-	-
	Sig. (2-tailed)	.000	-	-	-	-
Logistics Efficiency	Pearson Correlation	-.070	.115*	1	-	-
	Sig. (2-tailed)	.214	.041	-	-	-
Customer Service	Pearson Correlation	.201**	.449**	.416**	1	-
	Sig. (2-tailed)	.000	.000	.000	-	-
Brand Equity	Pearson Correlation	.495**	.448**	.349**	.442**	1
	Sig. (2-tailed)	.000	.000	.000	.000	-

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

\* . Correlation is significant at the 0.05 level (2-tailed).

The rule of thumb for person correlations is the significance level (2-tailed) < 0.05, which it means the correlation is statistically significant. Through the illustration of above table, only website design and logistics significance level is > 0.05 that means

two of the variables do not correlated, there is 0.214 chance to find out the population correlation is zero.

From the above table, it is clearly identified that the strongest correlation is between e-commerce website design and commodity quality:  $r = 0.654$ . This result is based on number of 318 respondents and its significance level (2-tailed),  $P\text{-value} = 0.000$ . This indicates that there is a 0.000 probability of finding this sample correlation or a larger one if the actual population correlation is zero.

In addition, the brand equity is positively correlated with the four independent variables of website design, commodity quality, logistics efficiency and customer service capability, what's more, the correlation is significant at the level of 0.01 (2-tailed).

#### 4.7 One-way ANOVA of TOP 3 Malaysia E-commerce Platforms

In this study, the author has sorted out the top 3 Malaysia e-commerce platforms respectively are Lazada, 11street and Shopee. Based on the data collected and sorted, ANOVA is executed to identify the factors whether related to platform's brand equity. This is aimed to analyze the significance of independent variables whether can contribute to the Malaysia e-commerce platform providers and in order to enhance their brand strategy on its brand equity.

From the table below, significance level of the top 3 platforms is  $0.000 < 0.05$ . This means that in this study the website design, commodity quality, logistics efficiency and customer service are significant factors and useful for the top 3 platforms.

Table 31 ANOVA of Top 3 Preferred Platforms

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
E-commerce Lazada	Between Groups	4.952	15	.330	17.590	.000

	Within Groups	5.668	302	.019		
	Total	10.619	317			
E-commerce 11street	Between Groups	42.125	15	2.808	26.431	.000
	Within Groups	32.089	302	.106		
	Total	74.214	317			
E-commerce Shopee	Between Groups	41.153	15	2.744	31.095	.000
	Within Groups	26.646	302	.088		
	Total	67.799	317			

#### 4.8 Summary of Findings

Through hypotheses test, regression analysis and correlation test, the findings of this research based on hypotheses are acceptable as below table shown.

Table 32 Summary of Findings

Hypotheses	Outcomes
<b>H<sub>1</sub>:</b> E-commerce Website Design has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.	Accept
<b>H<sub>2</sub>:</b> E-commerce Commodity Quality has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.	Accept
<b>H<sub>3</sub>:</b> E-commerce Logistics Efficiency has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.	Accept
<b>H<sub>4</sub>:</b> E-commerce Customer Service Capability has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.	Accept

## **4.9 Chapter Conclusion**

This chapter preceded a series of tests and analysis. Preliminary preparation of pilot test is commenced from 50 samples to validate and reliability-check the instrument. After validated instrument, the full-scale of data collected is proceeded as well. At the final stage of data collection, 402 respondents' data collected, except 1 respondent is not online shopper that not meeting the prerequisite requirement, and sorted 20-50 age group. It finalized the 318 data for the research.

Based on regression and hypothesis test, it can conclude that website design, commodity quality, logistics efficiency and customer service are positively related to the Malaysia e-commerce brand equity. Based on the ANOVA comparison result, these factors are all positively related to top 3 Malaysia e-commerce platforms. After multiple regression, the website design is the most related to the Malaysia e-commerce brand equity. Independent variables of website design, commodity quality and customer service are collectively explained the brand equity in Malaysia. However, the logistics efficiency is a factor accepted after the hypotheses test as well. It can individually contribute to the brand equity of platform. Therefore, the top 3 platforms can enhance its brand equity from the four aspects to compete in the fierce e-commerce market.

## Chapter 5 Conclusion and Constructive Suggestion

### 5.0 Overview

The fifth chapter is the final part of this study, which is mainly summarize research findings. On the basis of the findings, this part would provide some constructive suggestions and recommendation as well as the limitation of the study and implication for the future study. In light of hypotheses, the recommendations will be revealed on the basis of them. At the same time, the personal reflection regarding to this study will be illustrated at the end of this chapter.

### 5.1 Result Discussion

This study is mainly focus on examining whether e-commerce platform brand equity has relationship with e-commerce website design, commodity quality, logistics efficiency and customer service capability. Therefore, these four factors are designed into instrument to measure respondents' feeling. As the hypotheses developed, the research questions are respectively answered by it and also to identify the research objectives. This part is majorly discuss the hypotheses and research questions as well as combines some point of views from former literatures and researches.

All the research questions are able to figure out through below hypotheses.

Table 32 Summary of Findings

Hypotheses	Outcomes
H <sub>1</sub> : E-commerce Website Design has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.	Accept

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**H<sub>2</sub>:** E-commerce Commodity Quality has a significant relationship with E-commerce Providers' Brand Equity in Malaysia. Accept

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**H<sub>3</sub>:** E-commerce Logistics Efficiency has a significant relationship with E-commerce Providers' Brand Equity in Malaysia. Accept

---

**H<sub>4</sub>:** E-commerce Customer Service Capability has a significant relationship with E-commerce Providers' Brand Equity in Malaysia. Accept

---

As the result of hypotheses illustrated above, those hypotheses are able to answer the research questions respectively.

**Research Question 1: Does E-commerce Website Design have an influence on E-commerce Platforms' Brand Equity in Malaysia?**

From the first research question, it asked the critical variable of e-commerce website design whether has influence on the dependent variable of e-commerce platforms' brand equity. This is answered by the hypotheses one exactly right because of the hypotheses is accepted and assured that there is a relationship between e-commerce website design and Malaysia E-commerce platforms' brand equity. Most importantly, e-commerce website design is the major driving factor to affect e-commerce platforms' brand equity in this study.

**Research Question 2: Does E-commerce Commodity Quality have an influence on E-commerce Platforms' Brand Equity in Malaysia?**

The second hypotheses is related to research question 2 and proved that e-commerce commodity quality has contributed to e-commerce platforms' brand equity in Malaysia. According to simple linear regression and hypotheses testing, the result is

positive for e-commerce commodity quality to influence on e-commerce platforms' brand equity in Malaysia individually. Commodity quality is second major factor in the four proposed independent variables.

**Research Question 3: Does E-commerce Logistics Efficiency have an influence on E-commerce Platforms' Brand Equity in Malaysia?**

The third hypothesis has already proved that the e-commerce logistics efficiency has positive and significant relationship with e-commerce platforms' brand equity in Malaysia. Therefore, it can directly answer the third research question as well. Collectively explanation of logistics efficiency with other two variables, except commodity quality, has positive relationship with e-commerce platforms' brand equity in Malaysia as well. In a nutshell, e-commerce platform can enhance the cooperation with third-party logistics or transportation companies in the early stage when there is no abundant fund for logistics investment to make the brand equity of platform be more valued.

**Research Question 4: Does E-commerce Customer Service Capability have an influence on E-commerce Platforms' Brand Equity in Malaysia?**

Based on the corresponding fourth hypothesis, it has weak positive relationship, which means that e-commerce customer service capability still exist relationship and influence on e-commerce platforms' brand equity in Malaysia. In the meantime, collectively explanation of customer service capability with other two variables, except commodity quality, has positive relationship with e-commerce platforms' brand equity in Malaysia as well. Therefore, for this research, platform can increase the investment on customer service capability as well to improve the brand equity of e-commerce platform.

## **5.2 Recommendations**

Based on the former conclusion, this part will provide some constructive suggestions

to Malaysia e-commerce platforms from the factors proposed independent variables related to Malaysia e-commerce platforms' brand Equity. With the rapid advancement of Internet, Malaysia e-commerce platforms are emerging that facing a competitive development environment. Therefore, to use limited resources and funds to maximize e-commerce brand equity will be a serious issue for platforms.

### **In View Of E-Commerce Website Design**

Through the multiple regression analysis, we can conclude that website design are extremely contributed to e-commerce brand equity. Therefore, the e-commerce platform companies shall enhance and invest the development of website design. A good website design will give consumers a good impression. As Esch et al., (2006) introduced that, brand image and brand awareness can be improved through convenience and simplicity which can interpret that website design can respectively convey the simplicity and convenience to interact with consumers directly. Process of this step will enhance the brand equity. In the former research (Cho and Leckenby, 1999), the personalization of website service will leave a unique experience to a consumer that is positively correlated with consumer's loyalty and commitment due to the customized service. Platform can enhance the website design in terms of following aspects:

#### a) Color Scheme

In order to branding the e-commerce platforms, the platform shall firstly select the appropriate color scheme for different events at different periods. Different colors used for different platforms determine the customer types (Jin, 2009). Investing more fund and resources on color researching in terms of website design, and attract more customers to turn traffics into revenue of brand equity.

#### b) Website Content

The contents of platform are the first chance to speak and communicate with

customers. Platform shall express the professional and strong or young and fund culture from the designs, which indirectly convey a sense of leader in industry. As a result, high quality content and type of contents are playing a critical role of brand equity.

c) Design and Layout

The design and layout can reflect how the platform to interact with consumers. Make layout of platform be more attractive and interactive to enhance the stickiness with customer from the first click. More and more innovative features can apply into website design, increase the visibility of brand to build brand image of platform and enhance brand equity to realize the profit maximum.

**In view of E-commerce Commodity Quality**

With the rapid development of the economy, the development dividend from Internet economy has yielded in many industries development. Currently, the customers are not only reading the online product information, but also refer to the offline information with different channels. The rating system for platform is not just reflecting the feedbacks, but also reflecting the quality of commodities to give chances to consumers to ask and comment. In order to penetrate brands into different groups and enlarge market shares, Malaysia e-commerce platform providers shall improve the threshold for suppliers and strengthen the vendors' verification and examination system as result improving the level of commodity quality. On the other hand, the government departments can issue new regulations for Internet e-commerce vendors to strengthen regulation. The e-commerce platform as the legal body can intensify the inspection for all e-commerce vendors. Quality of products increased is able to increase the purchase intention and purchase willingness to maintain the customers.

In addition, e-commerce can make the product categories more precise and labeled the favorite lists for products, discount products and so forth. Precise classification

can reduce the time of consumers and effectively improve the search result to indirectly enhance the brand equity of platform.

### **In view of E-commerce Logistics Efficiency**

Factor of logistics efficiency has proved related to Malaysia e-commerce platform's brand equity. Therefore, platforms shall invest more funds on logistics efficiency chain such as order fulfillment software research and development and third-party logistics cooperation. If the platform does not have capability to establish its own distribution system and network, the platform can seek to cooperate with third-party logistics distributors to enhance the efficiency and increase the customer satisfaction. Logistics efficiency has individually affected the e-commerce brand equity as research analysis. Consumers are in a certain context affected by the logistics efficiency and accuracy of order processing. At the same time, the third-party logistics development level in Malaysia is not demonstrating high, which greatly limit the e-commerce brand equity in Malaysia.

Package damage and package lost are the major issue for transportation that results in a large number of complains. Thus, the platform and vendors shall strengthen the order fulfillment and choose the good reputation logistics companies for cooperation to avoid damage and complete the warehouse management. Those factors of warehouse system, transportation efficiency and order fulfillment are all related to brand equity in Malaysia e-commerce industry.

### **In view of E-commerce Customer Service Capability**

Friendly and nice attitudes and fast response may contribute to enhancing the e-commerce platform's attractiveness (Jin, 2009). Customer stickiness occurs in the well communication and service process, which it is valuable for platform to execute brand strategy. Company can ask clear questions to obtain concise communication before company to give a response. Furthermore, the e-commerce platform shall respond immediately for customer queries. However, for those questions cannot

feedback and answer immediately, the platform shall give a time line to consumer and confirm resolution later.

On the other hand, the platform can establish FAQ (Frequently Asked Questions) database for customer service staff to fast track questions. For those normal questions, platform can simplify the process and pass tasks to AI (Artificial Intelligence) to solve customer's questions satisfactorily. Besides, the platform and vendors can enhance the customer service training to improve capability and satisfaction of service.

### **5.3 Contributions**

As former chapter 1 mentioned that, in this study, there would be two major contributions. First of all, it is contributed to academic research.

#### **5.3.1 Contribution to Academy**

This study constructs brand equity model in terms of website design, commodity quality, logistics efficiency and customer service, and attempt to implement study of Malaysia e-commerce platform brand equity to prove the whether there are relationship exist. Concerning the differences in brand equity and e-commerce conceptual variables, this study attempt to combine the brand equity theory and online marketing and branding to test the relationships and so forth. The Esch et al., (2006) brand equity model has four dimensions consist of brand awareness, brand image, brand trust and brand loyalty can apply into the e-commerce brand equity. Through the study, e-commerce website design, commodity quality and customer service are collectively interpret the brand equity and the major driving force of brand equity as well. The proposed hypotheses are accepted as well.

#### **5.3.2 Contribution to E-commerce Platform Organizations**

As a matter of fact, the traditional marketing portfolio and online marketing are all enhancing brand awareness through advertisements, improve the brand quality through product management, and create brand image through pricing strategies (Jin,

2009). Those have limited significance to improve the e-commerce industry brand equity in the context of cyber or virtual world.

The value of the e-commerce platform is greatly affected by the branding factors in associated with the contents of the platform. Therefore, website design, commodity quality, logistics efficiency and customer service are interactivity or interconnected actions when a customer to proceed online shopping, which driving the e-commerce brand equity. Therefore, the platform company owners shall enhance the brand equity in terms of this study variable to turn brand equity to revenue and survive in the fierce e-commerce competition to make e-commerce platform be sustainable developing.

#### **5.4 Limitation of Study**

As we all know, there is no perfect study as well as this study has its limitations.

Firstly, the final research data is from 318 respondents, which is less than the proposed or targeted 384 respondents. As a result, the current outcomes might not reflect the whole population of Malaysia. What's more, due to online spread questionnaires, it means questionnaires cannot cover whole regions and areas of Malaysia. That is to say, it is difficult to measure all Malaysia population on e-commerce brand equity.

On the other hand, due to time constrain, the project is proceeding in a tight and high-tension environment. Therefore, some points and research findings are not able to represent the entire situation of Malaysia. Besides, since limited resources of literatures and similar research topics, it was tough to find sufficient and latest journals as the reference.

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## Appendix 1: SPSS Output

Table 10 Source Data of Component Matrix

	Rotated Component Matrix <sup>a</sup>					
	Component					
	1	2	3	4	5	6
11.1 I can identify the online website from others.		.785				
11.2 I can recall the online website and its features.		.689	.522			
12.1 I trust the online website and its services.		.741				
12.2 I have good impression on this website.		.714				
13.1 I trust the website would not leak my privacy to any parties.		.704				
13.2 I trust the credibility and reliability of the website.	.553	.693				
14.1 I want to visit and buy next time on this website	.822					
14.2 I want to recommend and share the website to other people	.676					
15.1 The website layout is my favorite and preferred online shopping site.	.684					
15.2 The loading speed will decide my using willingness.	.562					
15.3 The website interactive design (Query order) is meeting my needs.					.752	
15.4 The website design can attract me from other shopping websites.	.503		.562			
16.1 The quality of products received is same as website described.			.710			
16.2 The website has feedback and rating system for products quality.			.478		.489	

16.3 The website products have certification or verification (Quality Control).				.852	
16.4 The products quality of the website can attract me from other shopping websites.	.697		.523		
17.1 The website can deliver my products timely.	.691				
17.2 My parcel or package received without damage or broken.					.745
17.3 The logistics for purchase return is convenient.					.822
17.4 The logistics efficiency can attract me from other shopping websites.			.768		
18.1 The website customer service can answer my questions and enquiries timely				.806	
18.2 The website customer service can solve my questions satisfactorily.				.832	
18.3 The website customer service is always showing good attitude and qualified communication capability.				.477	
18.4 The customer service can decide my next shopping or not.				.556	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. Rotation converged in 10 iterations.

Table 10 Source Data of Communalities

Communalities		
	Initial	Extraction
11.1 I can identify the online website from others.	1.000	.757

11.2 I can recall the online website and its features.	1.000	.837
12.1 I trust the online website and its services.	1.000	.833
12.2 I have good impression on this website.	1.000	.817
13.1 I trust the website would not leak my privacy to any parties.	1.000	.775
13.2 I trust the credibility and reliability of the website.	1.000	.863
14.1 I want to visit and buy next time on this website	1.000	.778
14.2 I want to recommend and share the website to other people	1.000	.771
15.1 The website layout is my favorite and preferred online shopping site.	1.000	.745
15.2 The loading speed will decide my using willingness.	1.000	.788
15.3 The website interactive design (Query order) is meeting my needs.	1.000	.753
15.4 The website design can attract me from other shopping websites.	1.000	.817
16.1 The quality of products received is same as website described.	1.000	.726
16.2 The website has feedback and rating system for products quality.	1.000	.782
16.3 The website products have certification or verification (Quality Control).	1.000	.799
16.4 The products quality of the website can attract me from other shopping websites.	1.000	.871
17.1 The website can deliver my products timely.	1.000	.655

17.2 My parcel or package received without damage or broken.	1.000	.679
17.3 The logistics for purchase return is convenient.	1.000	.785
17.4 The logistics efficiency can attract me from other shopping websites.	1.000	.778
18.1 The website customer service can answer my questions and enquiries timely	1.000	.855
18.2 The website customer service can solve my questions satisfactorily.	1.000	.876
18.3 The website customer service is always showing good attitude and qualified communication capability.	1.000	.688
18.4 The customer service can decide my next shopping or not.	1.000	.695

Extraction Method: Principal Component Analysis.

Table 11 Source Data of KMO

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.847
Bartlett's Test of Sphericity	Approx. Chi-Square	916.445
	df	276
	Sig.	.000

Table 12 Source Data of Reliability

Cronbach's Alpha	N of Items
.943	24

Table 13 Source Data of Cronbach's Alpha for All Variables

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
BrandAwareness	27.7908	20.467	.711	.909
BrandImage	27.7704	20.453	.833	.899
BrandTrust	28.0663	20.143	.708	.910
BrandLoyalty	27.6684	21.379	.750	.906
WebsiteDesign	27.6071	21.589	.772	.905
CommodityQuality	27.6224	21.339	.736	.907
LogisticsEfficiency	27.9541	22.085	.627	.915
CustomerService	27.4847	21.045	.726	.907

Table 14 Source Data of Demographic Information

**Gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	158	39.4	39.4	39.4
	female	243	60.6	60.6	100.0
	Total	401	100.0	100.0	

**Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 20	83	20.7	20.7	20.7
	20-29	266	66.3	66.3	87.0
	30-39	46	11.5	11.5	98.5
	40-49	6	1.5	1.5	100.0
	Total	401	100.0	100.0	

**Highest education level**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School	6	1.5	1.5	1.5
	Associate/Diploma	82	20.4	20.4	21.9
	Bachelor/Degree	197	49.1	49.1	71.1
	Master or Above	116	28.9	28.9	100.0
	Total	401	100.0	100.0	

		Income, per month			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 3000	148	36.9	36.9	36.9
	3001-5000	134	33.4	33.4	70.3
	5001-7000	68	17.0	17.0	87.3
	7001-10000	51	12.7	12.7	100.0
	Total	401	100.0	100.0	

Table 15 Source Data of Online Shopping Behaviors

		How many years of using Internet?			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 3 years	10	2.5	2.5	2.5
	4-5 years	67	16.7	16.7	19.2
	6-7 years	147	36.7	36.7	55.9
	8-9 years	100	24.9	24.9	80.8
	more than 10 years	77	19.2	19.2	100.0
	Total	401	100.0	100.0	

		How long do you visit e-c websites per week?			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 3 hours	210	52.4	52.4	52.4
	4-5 hours	127	31.7	31.7	84.0
	6-7 hours	36	9.0	9.0	93.0
	8-9 hours	18	4.5	4.5	97.5
	more than 10 hours	10	2.5	2.5	100.0
	Total	401	100.0	100.0	

		How much you spend online per year?			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1000 RM	104	25.9	25.9	25.9

1001-2000 RM	148	36.9	36.9	62.8
2001-3000 RM	98	24.4	24.4	87.3
3001-4000 RM	16	4.0	4.0	91.3
more than 4001 RM	35	8.7	8.7	100.0
Total	401	100.0	100.0	

**You bought Groceries**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	168	41.9	41.9	41.9
	Yes	233	58.1	58.1	100.0
Total		401	100.0	100.0	

**You bought Digital products**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	227	56.6	56.6	56.6
	Yes	174	43.4	43.4	100.0
Total		401	100.0	100.0	

**You bought Top-up & Tickets**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	149	37.2	37.2	37.2
	Yes	252	62.8	62.8	100.0
Total		401	100.0	100.0	

**You bought Clothing, Shoes, Bags**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	83	20.7	20.7	20.7
	Yes	318	79.3	79.3	100.0
Total		401	100.0	100.0	

**You bought Cosmetics**

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	No	222	55.4	55.4	55.4
	Yes	179	44.6	44.6	100.0
	Total	401	100.0	100.0	

**You bought Home & Furniture**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	352	87.8	87.8	87.8
	Yes	49	12.2	12.2	100.0
	Total	401	100.0	100.0	

**You bought Others**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	336	83.8	83.8	83.8
	Yes	65	16.2	16.2	100.0
	Total	401	100.0	100.0	

**You pain to buy Groceries**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	149	37.2	37.2	37.2
	Yes	252	62.8	62.8	100.0
	Total	401	100.0	100.0	

**You plan to buy Digital products**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	168	41.9	41.9	41.9
	Yes	233	58.1	58.1	100.0
	Total	401	100.0	100.0	

**You plan to buy Top-up & Tickets**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	83	20.7	20.7	20.7
	Yes	318	79.3	79.3	100.0
	Total	401	100.0	100.0	

**You plan to buy Clothing, Shoes, Bags**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	222	55.4	55.4	55.4
	Yes	179	44.6	44.6	100.0
Total		401	100.0	100.0	

**You plan to buy Cosmetics**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	352	87.8	87.8	87.8
	Yes	49	12.2	12.2	100.0
Total		401	100.0	100.0	

**You plan to buy Home & Furniture**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	284	70.8	70.8	70.8
	Yes	117	29.2	29.2	100.0
Total		401	100.0	100.0	

**You plan to buy Others**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	314	78.3	78.3	78.3
	Yes	87	21.7	21.7	100.0
Total		401	100.0	100.0	

Table 16 Source Data of Factor Analysis

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.696
Bartlett's Test of Sphericity	Approx. Chi-Square	631.428
	df	6
	Sig.	.000

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.692
Bartlett's Test of Sphericity	Approx. Chi-Square	3373.946
	df	120
	Sig.	.000

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.703	67.569	67.569	2.703	67.569	67.569
2	.790	19.746	87.315			
3	.290	7.250	94.566			
4	.217	5.434	100.000			

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.918	30.739	30.739	4.918	30.739	30.739	4.160	26.002	26.002
2	3.113	19.459	50.198	3.113	19.459	50.198	2.330	14.560	40.562
3	1.645	10.278	60.476	1.645	10.278	60.476	2.065	12.907	53.469
4	1.530	9.562	70.039	1.530	9.562	70.039	1.871	11.691	65.160
5	1.020	6.375	76.414	1.020	6.375	76.414	1.801	11.253	76.414
6	.855	5.343	81.756						
7	.672	4.202	85.958						
8	.562	3.510	89.468						
9	.378	2.364	91.832						
10	.315	1.971	93.802						
11	.288	1.798	95.601						
12	.193	1.205	96.805						
13	.175	1.093	97.899						
14	.138	.860	98.759						
15	.116	.727	99.486						
16	.082	.514	100.000						

Extraction Method: Principal Component Analysis.

### Communalities

	Initial	Extraction
11.1 I can identify the online website from others.	1.000	.792
11.2 I can recall the online website and its features.	1.000	.849
12.1 I trust the online website and its services.	1.000	.791
12.2 I have good impression on this website.	1.000	.872
13.1 I trust the website would not leak my privacy to any parties.	1.000	.795
13.2 I trust the credibility and reliability of the website.	1.000	.842
14.1 I want to visit and buy next time on this website	1.000	.798
14.2 I want to recommend and share the website to other people	1.000	.816
15.1 The website layout is my favorite and preferred online shopping site.	1.000	.635
15.2 The loading speed will decide my using willingness.	1.000	.792
15.3 The website interactive design (Query order) is meeting my needs.	1.000	.731
15.4 The website design can attract me from other shopping websites.	1.000	.783
16.1 The quality of products received is same as website described.	1.000	.796
16.2 The website has feedback and rating system for products quality.	1.000	.778
16.3 The website products have certification or verification (Quality Control).	1.000	.821

16.4 The products quality of the website can attract me from other shopping websites.	1.000	.849
17.1 The website can deliver my products timely.	1.000	.851
17.2 My parcel or package received without damage or broken.	1.000	.803
17.3 The logistics for purchase return is convenient.	1.000	.845
17.4 The logistics efficiency can attract me from other shopping websites.	1.000	.663
18.1 The website customer service can answer my questions and enquiries timely	1.000	.902
18.2 The website customer service can solve my questions satisfactorily.	1.000	.908
18.3 The website customer service is always showing good attitude and qualified communication capability.	1.000	.774
18.4 The customer service can decide my next shopping or not.	1.000	.804

Extraction Method: Principal Component Analysis.

Table 17 Source Data of Reliability Test Result

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.939	.945	24

**Reliability Statistics**

Cronbach's Alpha	N of Items
.820	4

**Reliability Statistics**

Cronbach's Alpha	N of Items
.765	16

Table 19 Source Data

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.240	1	24.240	102.305	.000 <sup>b</sup>
	Residual	74.872	316	.237		
	Total	99.112	317			

- a. Dependent Variable: BrandEquity
- b. Predictors: (Constant), WebsiteDesign

Table 20 Source Data

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.412	.255		5.546	.000		
	WebsiteDesign	.592	.059	.495	10.115	.000	1.000	1.000

- a. Dependent Variable: BrandEquity

Table 21 Source Data

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.920	1	19.920	79.489	.000 <sup>b</sup>
	Residual	79.191	316	.251		
	Total	99.112	317			

- a. Dependent Variable: BrandEquity
- b. Predictors: (Constant), CommodityQuality

Table 22 Source Data

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.953	.228		8.561	.000		
	CommodityQuality	.461	.052	.448	8.916	.000	1.000	1.000

a. Dependent Variable: BrandEquity

Table 23 Source Data

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.079	1	12.079	43.857	.000 <sup>b</sup>
	Residual	87.032	316	.275		
	Total	99.112	317			

a. Dependent Variable: BrandEquity

b. Predictors: (Constant), LogisticsEfficiency

Table 24 Source Data

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.890	.166		17.417	.000		
	LogisticsEfficiency	.284	.043	.349	6.622	.000	1.000	1.000

a. Dependent Variable: BrandEquity

Table 25 Source Data

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.343	1	19.343	76.628	.000 <sup>b</sup>
	Residual	79.768	316	.252		
	Total	99.112	317			

a. Dependent Variable: BrandEquity

b. Predictors: (Constant), CustomerService

Table 26 Source Data

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.583	.161		16.019	.000		
	CustomerService	.334	.038	.442	8.754	.000	1.000	1.000

a. Dependent Variable: BrandEquity

Table 27 Source Data

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.658 <sup>a</sup>	.433	.426	.42378	1.425

a. Predictors: (Constant), LogisticsEfficiency, WebsiteDesign, CustomerService, CommodityQuality

b. Dependent Variable: BrandEquity

Table 28 Source Data

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.901	4	10.725	59.721	.000 <sup>b</sup>
	Residual	56.211	313	.180		
	Total	99.112	317			

a. Dependent Variable: BrandEquity

b. Predictors: (Constant), LogisticsEfficiency, WebsiteDesign, CustomerService, CommodityQuality

Table 29 Source Data

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.066	.269		-.246	.806		
	CustomerService	.169	.040	.224	4.272	.000	.661	1.512
	WebsiteDesign	.551	.069	.460	8.014	.000	.549	1.821

CommodityQuality	.014	.064	.014	.226	.822	.467	2.140
LogisticsEfficiency	.234	.039	.287	6.032	.000	.802	1.247

a. Dependent Variable: BrandEquity

Table 30 Source Data of Pearson Correlations

		Correlations				
		WebsiteDesign	CommodityQuality	LogisticsEfficiency	CustomerService	BrandEquity
WebsiteDesign	Pearson Correlation	1	.654**	-.070	.201**	.495**
	Sig. (2-tailed)		.000	.214	.000	.000
	N	318	318	318	318	318
CommodityQuality	Pearson Correlation	.654**	1	.115*	.449**	.448**
	Sig. (2-tailed)	.000		.041	.000	.000
	N	318	318	318	318	318
LogisticsEfficiency	Pearson Correlation	-.070	.115*	1	.416**	.349**
	Sig. (2-tailed)	.214	.041		.000	.000
	N	318	318	318	318	318
CustomerService	Pearson Correlation	.201**	.449**	.416**	1	.442**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	318	318	318	318	318
BrandEquity	Pearson Correlation	.495**	.448**	.349**	.442**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	318	318	318	318	318

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

\* . Correlation is significant at the 0.05 level (2-tailed).

Table 31 Source Data of Top 3 Preferred Platforms

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
E-commerce website you preferred Lazada	Between Groups	4.952	15	.330	17.590	.000
	Within Groups	5.668	302	.019		

	Total	10.619	317			
E-commerce website you preferred 11street	Between Groups	42.125	15	2.808	26.431	.000
	Within Groups	32.089	302	.106		
	Total	74.214	317			
E-commerce website you preferred Shopee	Between Groups	41.153	15	2.744	31.095	.000
	Within Groups	26.646	302	.088		
	Total	67.799	317			

## Appendix 2: Initial Research Proposal Paper

**INTI International University**  
**Master of Business Administration MGT7999**

**Initial Research Paper Proposal**

<b>STUDENT NAME &amp; ID NO</b>	Qiao Shuai I18015085
<b>BROAD AREA</b>	Marketing
<b>Concise Title</b>	E-commerce Platforms' Brand Equity in Malaysia
<b>Problem Definition</b>	<p>There are about 79.8% of consumers that will transfer e-commerce platform from one to other after customers' first purchasing in Malaysia (Lin and Wang, 2015).</p> <p>The former studies (Albert et al., 2017; Banerjee, 2016; Zhao, Li and Pan, 2015) show that the e-commerce development and adoption progress and suggested business organizations are mainly making profit after business normal running <b>3 years</b>, however, consumers would not willing to be loyalty at only one website less than 3 years that means consumers will change to the other new e-commerce platforms, which resulting in customers loss, decreasing of revenue, reducing of platform traffic. All these situations will finally lead to market stagnant and make e-commerce platform and companies towards bankruptcy (Mazzarol, 2015).</p>
<b>Research Questions/ Objectives</b>	<p><b>RQ 1:</b> Does E-commerce Website Design have a significant relationship with E-commerce Providers' Brand Equity in Malaysia?</p> <p><b>RQ 2:</b> Does E-commerce Commodity Quality have a</p>

	<p>significant relationship with E-commerce Providers' Brand Equity in Malaysia?</p> <p><b>RQ 3:</b> Does E-commerce Logistics Efficiency have a significant relationship with E-commerce Providers' Brand Equity in Malaysia?</p> <p><b>RQ 4:</b> Does E-commerce Customer Service Capability have a significant relationship with E-commerce Providers' Brand Equity in Malaysia?</p> <p><b>RO1:</b> To determine whether E-commerce Website Design has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.</p> <p><b>RO2:</b> To determine whether E-commerce Commodity Quality has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.</p> <p><b>RO3:</b> To determine whether E-commerce Logistics Efficiency has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.</p> <p><b>RO4:</b> To determine whether E-commerce Customer Service Capability has a significant relationship with E-commerce Providers' Brand Equity in Malaysia.</p>
<p><b>Scope of Study</b></p>	<p>The context of this study is focusing in Malaysia, where the brand equity is been concerned by local consumers, and influenced by the online shopping environment (Chin et al., 2018).</p> <p>According to Statista (2018) introduced that there are around 19.8 million e-commerce users in Malaysia, means more than half of Malaysians have online</p>

	<p>shopping experience. In light of brand equity, half of consumers are having different focuses. Thus, the study is primarily focus on group of young people, age ranged from 20 to 40 years old (those who were born from 1980 to 2012, also indicates as the Generation Y and Generation Z) since these groups of consumers have capability to shop online and willing to purchase products from e-commerce platform.</p>
<p><b>Significance of the Research</b></p>	<p><b>Significance to Academy:</b></p> <p>This study will contribute positively to theory and the practice. In term of theoretical perspective, former researchers are focusing on the previous brand equity and adopting situation of E-commerce (Ahmad et al., 2015).</p> <p>In this study, on the basis of former studies of traditional brand equity and characteristics of e-commerce, this study explore the gaps and find out the specific factors in associated with Malaysia e-commerce brand equity, which is able to provide reference for the subsequent study.</p> <p>It contributes to the brand strategy management and research in E-commerce industry.</p> <p><b>Significance to E-commerce Platform:</b></p> <p>This study can give e-commerce platforms' suggestion and direction that concerned by customers, and allow platform owners to enhance platform brand equity to reduce loss of customers, and attract customers from physical store to e-commerce.</p> <p>E-commerce platforms analyze and meet the</p>

	<p>consumers' needs, to enhance its platform brand equity, attract customers from physical store to gain competitive advantages and turn brand equity to revenue</p>
<p><b>Literature Review</b></p>	<p>Awareness in a certain extent is like a compass and shows the direction for the business marketing activities (Baldauf, Artur, Karen s. Cravens, and Gudrun binder, 2012).</p> <p>Brand equity consists of series of joint operations by clients and corporates for obtaining more profits and more benefits, which it can bring more competitive advantages for the brand (Chiu, Wang, Fang and Huang, 2014).</p> <p>Website design refers to the information of product or service delivered through the e-commerce website is accurate (Cyr, 2014).</p> <p>Quality assurance of commodity plays an important role for affecting the customer behaviors (Davidavičienė, Vida and Tolvaišas, Jonas., 2011).</p> <p>Brand equity theory is brand knowledge in terms of brand image and brand awareness, brand relationship in terms of brand satisfaction, brand trust and brand attachment, and the behavior outcomes in terms of current purchase and future purchase (Esch, Langner, Schmitt and Geus, 2006).</p>
<p><b>Research Methodology</b></p>	<p><b>Organization to study:</b> E-commerce users and online shoppers</p> <p><b>Population &amp; Sample:</b></p> <p>A random of 384 customers should be drawn from the</p>

	<p>population of 19.08 million e-commerce users in Malaysia. Final data processing is 318 after sorted.</p> <p><b>Data collection method:</b></p> <p>This study will use online and paper questionnaires.</p> <p><b>Analysis of the Results /Statistical Analysis:</b></p> <p>This study will adopt descriptive and inferential statistical analysis.</p> <p><b>Descriptive Analysis:</b></p> <p>This study will consist 4 simple items on demographic information such as Gender, Age, Income, Educational. The other descriptive is focus on e-commerce using experience.</p> <p><b>Inferential Analysis:</b> SPSS will be used in testing research hypotheses and regressions.</p>
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## Appendix 3: Questionnaire

### **Dear Participants,**

As a part of my Master of Business Administration (MBA) study from INTI International University, I am doing my final project of questionnaire that needs your assistance for my research.

The survey is designated to collect the data and information for studying Malaysia E-commerce platforms' brand equity. Please kindly provide your assistance to answer the following questions. This survey shall only take 5-10 minutes to complete.

Be assured that all your individual answers and any other information about you will remain strictly confidential.

In case of any questions and problems regarding to this questionnaire or details, please do not hesitate to get in touch with me at [i18015085@student.newinti.edu.my](mailto:i18015085@student.newinti.edu.my).

Thank you for your time!

Sincerely yours,

Qiao Shuai

### **Prerequisite Question:**

Are you an online shopper?

Yes       No

(If Yes, please continue the following questions! Thank you!)

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### **Section 1 Demographic Information**

1. Gender?

Male       Female

2. Age?

Below 20       20-29       30-39       40-49       50 and above

3. Highest education level?

- High School     Associate/Diploma     Bachelor/Degree     Master or Above

4. Income (Per month, Ringgit):

- Less than 3000     3001-5000     5001-7000     7001-10000     more than 10001

## Section 2 General Information about E-commerce

5. How many years have you using Internet?

- Less than 3 years     4-5 years     6-7 years     8-9 years     more than 10 years

6. How long do you visit e-commerce websites every week (eg: Lazada, 11street, shoppee etc)?

- Less than 3 hours     4-5 hours     6-7 hours     8-9 hours     more than 10 hours

7. How much did you spend on online purchase per **year**?

- Less than 1000 RM     1001-2000 RM     2001-3000 RM     3001- 4000 RM     more than 4001 RM

8. Which following e-commerce website(s) do you preferred? (Can choose MORE than one option)

- Lazada     11street     Shopee     Lelong     Carousell  
 Zalora     Qoo10     eBay     Fave     Herno     Others

9. What products did you buy?

- Groceries     Digital Products     Top-up, E-store or Tickets  
 Clothing, Shoes, Bags     Cosmetics     Home & Furniture     Others

10. What products do you plan or intend to buy?

- Groceries     Digital Products     Top-up, E-store or Tickets  
 Clothing, Shoes, Bags     Cosmetics     Home & Furniture     Others

## Section 3 E-commerce Brand Equity and Independent Variables

<b>Brand Awareness</b>	Response Rate				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
11.1 I can identify the online website from others.					
11.2 I can recall the online website and its features.					

<b>Brand Image</b>	Response Rate				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
12.1 I trust the online website and its services.					
12.2 I have good impression on this website.					

<b>Brand Trust</b>	Response Rate				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
13.1 I trust the website would not leak my privacy to any parties.					
13.2 I trust the credibility and reliability of the website.					

<b>Brand Loyalty</b>	Response Rate				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
14.1 I want to visit and buy next time on this website					
14.2 I want to recommend and share the website to other people					

<b>E-commerce Website Design</b>	Response Rate				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

15.1 The website layout is my favorite and preferred online shopping site.					
15.2 The loading speed will decide my using willingness.					
15.3 The website interactive design (Query order) is meeting my needs.					
15.4 The website design can attract me from other shopping websites.					

<b>E-commerce Commodity Quality</b>	<b>Response Rate</b>				
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
16.1 The quality of products received is same as website described.					
16.2 The website has feedback and rating system for products quality.					
16.3 The website products have certification or verification (Quality Control).					
16.4 The products quality of the website can attract me from other shopping websites.					

<b>E-commerce Logistics Efficiency</b>	<b>Response Rate</b>				
	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
17.1 The website can deliver my products timely.					
17.2 My parcel or package received without damage or broken.					
17.3 The logistics for purchase return is convenient.					
17.4 The logistics efficiency can attract me from other shopping websites.					

<b>E-commerce Customer Service Capability</b>	<b>Response Rate</b>
---	----------------------

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
18.1 The website customer service can answer my questions and enquiries timely					
18.2 The website customer service can solve my questions satisfactorily.					
18.3 The website customer service is always showing good attitude and qualified communication capability.					
18.4 The customer service can decide my next shopping or not.					

## Appendix 4: PROJECT PAPER LOG

This is an important document, which is to be handed in with your dissertation. This log will be taken into consideration when awarding the final mark for the dissertation.

<b>Student Name:</b>	Qiao Shuai
<b>Supervisor's Name:</b>	Dr. Sam Toong Hai
<b>Dissertation Topic:</b>	E-commerce Platforms' Brand Equity in Malaysia

### SECTION A. MONITORING STUDENT DISSERTATION PROCESS

The plan below is to be agreed between the student & supervisor and will be monitored against progress made at each session.

Activity	Milestone/Deliverable Date			
	January	February	March	April
Topic Proposal	24 Jan, 2019			
Literature Review	24 Jan, 2019			
Chapter 1-3		1 Feb, 2019	11 March, 2019	
Finalize Questionnaire			12 March, 2019	
Proposal Defense			21 March, 2019	
Data Collection & Analysis			22 March, 2019	1 April, 2019
Conclusion				2 April, 2019
Recommendation				
Chapter 4-5				3 April, 2019

Project Final Viva				18 April, 2019
Final Project Paper Submit				30 April, 2019

### **SECTION B. ETHICS**

Ethics form protocol number:-

### **SECTION C. RECORD OF MEETINGS**

**The expectation is that students will meet their supervisors up to seven times and these meetings should be recorded.**

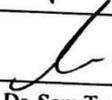
### Meeting 1

Date of Meeting	24 January 2019
Progress Made	<ul style="list-style-type: none"><li>- Justify the Research topic word</li><li>- Enhance the Research Problem Statement</li><li>- Enhance the Research background</li></ul>
Agreed Action	To do above progress suggestions
Student Signature	
Supervisor's Signature	 Dr. Sam Toong Hai Head of Programme Faculty of Business, Communications & Law INTI International University

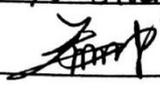
### Meeting 2

Date of Meeting	1 March 2019
Progress Made	Problem Statement has already been well defined.
Agreed Action	Modify Research Objectives and improve on it. Design the questionnaire
Student Signature	
Supervisor's Signature	 Dr. Sam Toong Hai Head of Programme Faculty of Business, Communications & Law INTI International University

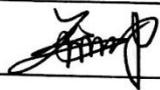
### Meeting 3

Date of Meeting	4 March 2019
Progress Made	<ul style="list-style-type: none"><li>- Discuss overall framework and hypothesis</li><li>- Finalize the research objectives</li></ul>
Agreed Action	prepare literature review of chapter 2 for next meeting.
Student Signature	
Supervisor's Signature	 Dr. Sam Toong Hai Head of Programme Faculty of Business, Communications & Law INTI International University

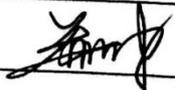
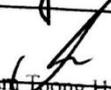
**Meeting 4**

Date of Meeting	6 March 2019
Progress Made	Discuss chapter 2 Literature Review
Agreed Action	- Make sure all journals are related to variables - To study research methodology for next meeting
Student Signature	
Supervisor's Signature	 Dr. Sam Toong Hai Head of Programme Faculty of Business, Communications & IT INTI International University

**Meeting 5**

Date of Meeting	8 March 2019
Progress Made	Finalize chapter 3 Methodology
Agreed Action	Discuss Research methods, Sample size, Population and so forth.
Student Signature	
Supervisor's Signature	 Dr. Sam Toong Hai Head of Programme Faculty of Business, Communications & IT INTI International University

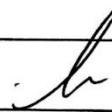
**Meeting 6**

Date of Meeting	12 March 2019
Progress Made	Review chapter 1-3.
Agreed Action	- Questions discussion and modifying - Confirm the Questionnaire for survey
Student Signature	
Supervisor's Signature	 Dr. Sam Toong Hai Head of Programme Faculty of Business, Communications & Law INTI International University

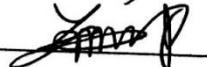
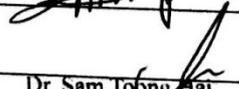
**Meeting 7**

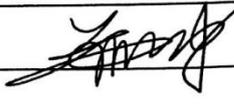
Date of Meeting	18 March 2019
Progress Made	Discuss proposal defense slides
Agreed Action	Rehearse presentation of PD and proper enhancement on slides.
Student Signature	
Supervisor's Signature	Dr. Sam Toong Hai Head of Programme Faculty of Business, Communications & ... INTI International University 

**Meeting 8**

Date of Meeting	22 March 2019
Progress Made	Discuss chapter 4 : research findings Draft chapter 5.
Agreed Action	- Small-scale data collection & result discussion - Findings discussion and adjustment
Student Signature	
Supervisor's Signature	Dr. Sam Toong Hai Head of Programme Faculty of Business, Communications & ... INTI International University 

**Meeting 9**

Date of Meeting	27 March 2019
Progress Made	- Discuss chapter 5 conclusion and Review chapter 4 - 5
Agreed Action	- Make sure chapter 4, data is related to research. - Justify the conclusion & recommendation
Student Signature	
Supervisor's Signature	Dr. Sam Toong Hai Head of Programme Faculty of Business, Communications & ... INTI International University 

Meeting 10	
Date of Meeting	3 April, 2019
Progress Made	Discuss final viva presentation slides.
Agreed Action	- Simplify first three chapters in slides - Enhance chapter 4-5 findings and recommendation
Student Signature	
Supervisor's Signature	 Dr. Sam Toong Hai Head of Programme Faculty of Business, Communications & IT INTI International University

#### Section D. Comments on Management of Project

(to be completed at the end of the dissertation process)

##### Student Comments

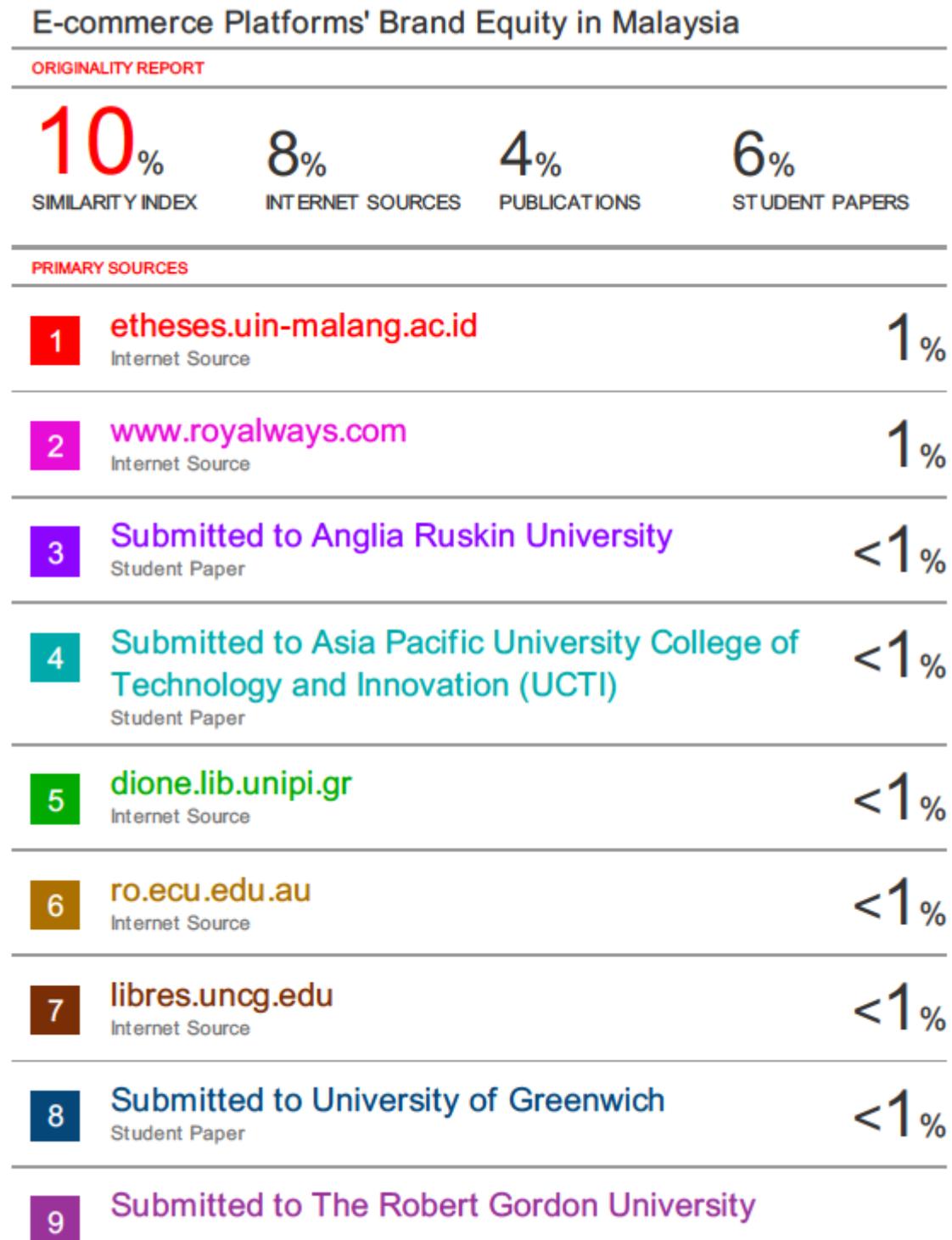
Really appreciate Dr. Sam's help and guidance.  
He directed me to manage the project efficiently.

##### Supervisor Comments

Qiao Shuai is a dedicated student. He has spent much efforts and shown his competences in completing the project. well done Qiao Shuai.

Signature of Student		Date	30/04/2019
Signature of Supervisor	Dr. Sam Toong Hai Head of Programme Faculty of Business, Communications & IT INTI International University 	Date	30/04/2019.
Ethics Confirmed		Date	

## Appendix 5: Turnitin Result



	Student Paper	<1%
10	<a href="http://epubs.scu.edu.au">epubs.scu.edu.au</a> Internet Source	<1%
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19	"Driving the Economy through Innovation and Entrepreneurship", Springer Nature, 2013 Publication	<1%
	Submitted to University of Hull	

20	Student Paper	<1%
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25	nsuworks.nova.edu Internet Source	<1%
26	"Advertising Confluence", Springer Nature, 2015 Publication	<1%
27	Submitted to Westminster International College - Kuala Lumpur Student Paper	<1%
28	eprints.utar.edu.my Internet Source	<1%
29	Submitted to School of Oriental & African Studies Student Paper	<1%
30	Submitted to Universiti Teknologi Malaysia Student Paper	<1%