

A STUDY ON GENERATION Y'S PERCEPTION  
TOWARDS CHINESE SMARTPHONE BRANDS

GOH LI JIE

MASTER OF BUSINESS ADMINISTRATION

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND  
MANAGEMENT

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Goh Li Jie

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By

Goh Li Jie

This research project is supervised by:

Malathi Nair A/P G Narayana Nair  
Senior Lecturer  
Department of International Business  
Faculty of Accountancy and Management

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## DECLARATION

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- (1) This Research Project is the end result of my own work and that due acknowledgement has been given in the references to all sources of information be they printed, electronic, or personal.
- (2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
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Name of Student: Goh Li Jie

Student ID: 18UKM07279

Signature:

Date: 25<sup>th</sup> September 2019

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## DEDICATION

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## **PREFACE**

The basis for this research originally stemmed from my passion for developing better understanding in increasing the sales of Chinese brand smartphones. As China has a remarkable period of rapid growth in economy, it is hoped that the stereotype where China-made products often associated with being poor in quality and can be easily broken. The Chinese brands smartphones are not of lesser quality but just having a lower price compared to their non-Chinese brand smartphones. There is only one way to find out how the Generation Y in Malaysia perceived Chinese brand smartphones and what are the factors which affect their purchasing intention, which is by carrying out this research.

Frankly speaking, I could not have achieved my current level of success without a strong support from my supervisor, lecturers and friends. Thank you to each and every one of you. It is hoped that this study shall serve as a guideline for various parties especially the Chinese smartphone brands marketers.

## **ABSTRACT**

Chinese smartphones brands are currently rising and expanding their international market. Currently, Generation Y who are tech-savvy and rely more on technical devices than other generations are the largest buyer of smartphones in Malaysia. The main objectives of this research is to determine the factors influencing the purchasing intention towards Chinese brands smartphones. Based on literature reviews, this study finds five factors that influence Chinese brand smartphones purchasing intention namely perceived usefulness, perceived ease of use, price, social influence and perceived quality. This research used a questionnaire with a 5-point Likert scale for data collection and a sample of 150 Generation Y respondents from the Klang Valley region of Malaysia. It is found that only social influence and perceived quality have significant impacts on the Chinese brands smartphones purchasing intentions. Other factors such as perceived usefulness ,perceived ease of use and price are statistically insignificant. Hence, marketers in the smartphones industry, specifically in the Chinese smartphone market can consider these factors to assess and help improve their sales.



# CHAPTER 1

## INTRODUCTION

### 1.0 Introduction

An overall view of this report will be written in this chapter. It has eight sections which are the research background, problem statement, research objectives, research questions, importance of research, research gap, chapter layout and conclusion. The research questions in this chapter had brought forward to the objectives of this research. Besides, the readers will have a better comprehension of the objectives of this research from the provided research objectives.

### 1.1 Research Background

Generation Y or also known as Millennials are the people who were born in the time from the early 1980s to the mid 1990s and early 2000s (Stein, 2013). However, throughout the years, different sources have different views on the year where the Generation Y were born in. Mafini, Dhurup and Mandhlazi (2014) mentioned that Generation Y can be also called as the Millennium Generation, DotNet, Nexters, Net Generation, Echo Boomers and We Generation. In 2019, Pew Research Center, who has been studying about the Millennials for more than a decade, conclude that people who were born from 1981 to 1996 will be considered a Millennial (Dimock, 2019). This claim is also supported by the information on Millennials by the World Economic Forum (Wood, 2018). Jirasevijinda (2018) and Becker (2019) also

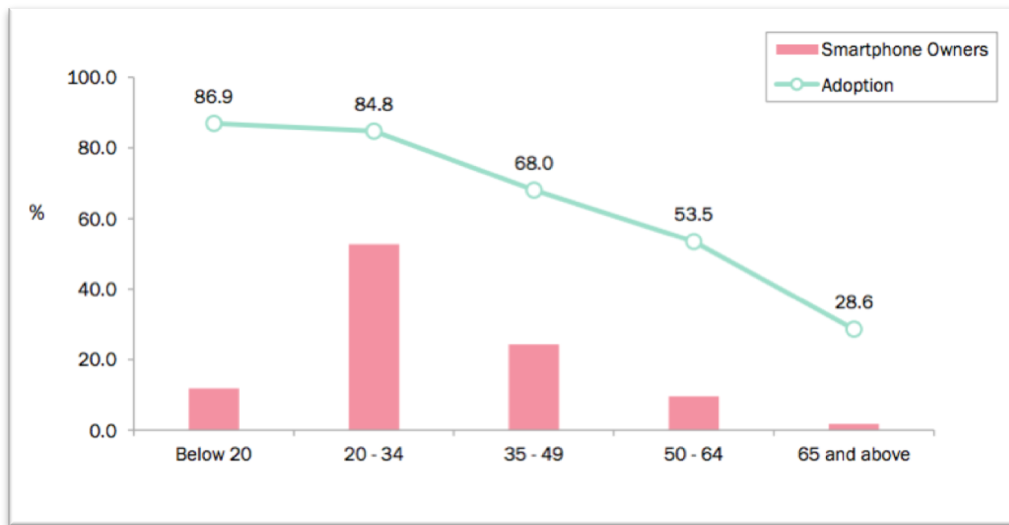
defined the Millennials generation as those who are born from 1981 to 1996 in their journals.

It is perceived that Millennials are fun seekers and often having their smartphones glued to their hands. However, it is untrue as they age during the recession time, with wars of Iraq and Afghanistan and the 9/11 terrorist incident happening around them. This made them to inculcate the sense of global responsibility (Becker, 2019). Besides, Millennials also undergone the internet explosion where they are considered as digital natives and are the most educated generation who use devices in their work, studies and even for socializing. They favour texting and sending messages over making phone calls as it is less formal. Thus, this makes them to have their smartphones as a necessity in life and will never leave home without them.

In this era of modern technology, smartphone is one of the essential items which has become an inseparable part of our daily lives. It is a mobile phone which almost has the capability to perform Internet-based services, just like a computer. Moreover, it also has an operating system which enables downloading and running applications which are developed by third-party developers (Malaysian Communications and Multimedia Commission, 2017). Smartphones are so crucial in our life that it is not feasible to live without smartphones in today's world.

Figure 1.1 explicits the percentage of smartphone owners and the smartphone adoption rate by age group collected by Malaysian Communications and Multimedia Commission (2017). It showed that the highest smartphone owners and adoption rate are people who have the age of 20 to 34. Most of the people in this group are considered as Millennials who are at the age range of 23-38. Thus, it would be intriguing to study on Millennials towards their perception on smartphones as they have greater spending power compared to other generation and their spending shows the depth of technology they are using in their daily life (Yan, 2018).

**Figure 1.1: Smartphone Owners and Adoption Rate Distribution by Age Group**



Source: From Malaysian Communications and Multimedia Commission. (2017). Hand phone users survey 2017.

Based on Table 1.1, year by year, the number of smartphone users are increasing. Currently, in 2019, the forecasted amount is 3.3 billions and hoped to have a growth to 3.8 billion users two years later. Thus, this shows that the smartphone market will keep on expanding. Besides keeping up with the latest technology, all smartphone firms need to maintain its quality and competitive pricing to gain competitive advantage.

**Table 1.1: Smartphone Users Worldwide from 2016 to 2021**

Year	Amount of smartphone users (billions)
2021*	3.8
2020*	3.5
2019*	3.3
2018*	3.0
2017	2.7
2016	2.5

\*Forecast

Source: From Holst, A. (2019, July 26). Smartphone users worldwide 2016-2021. *Statista*.

It is common for the public to think of brand names such as Apple and Samsung when it comes to smartphones because of their brand equity. A positive brand equity is vital because it influences one's company bottom line. High brand equity level also tends to contribute to higher consumer preferences and purchase intentions (Jyothsna, Mahalakshmi & Sandeep, 2016). Country of origin (COO) is referred as the perception of a consumer towards a product's place of manufacture (Cateora & Graham, 1999). In other words, COO is regarded as different brands which belong to different countries. For example, Samsung is a Korean brand while Apple is an American brand. It is same goes to Huawei, which is known as a Chinese brand. Thus, China is the country of origin for Huawei products. In Hanzaee and Khosrozadeh's research (2011), it is found that the COO shapes the consumers' perception towards products or brands from a particular country.

Chinese smartphone brands bring a meaning of smartphone companies which are mainly owned by the mainland Chinese themselves. The Chinese phone makers who are regarded as cheap and disposable are on the rise, competing with other major foreign companies such as Apple and Samsung (Green, n.d.). They are now driving hard into new economies and making way in mature regions. Moreover, according to Wu and Chen (2015), six out of ten smartphones in the global ranking belong to Chinese phone makers as early as in the year of 2014, namely Lenovo, Xiaomi, ZTE, Alcate, Huawei and Coolpad. Besides, in recent years, brands like Oppo and Vivo are catching up too (Olson, 2017).

Huawei Technologies Co. has just become the world's second largest smartphone maker, knocking Apple Inc. to the third, and vows to be the top before the end of 2019 (Bloomberg News, 2018). Little do the consumers know but in 2017, China is the largest exporter of smartphones with US\$127.3 billion with a total of 48% of the amount of the smartphone exportation (Workman, 2019). Based on Table 1.2, the first quarter of 2019, Samsung Huawei, Apple, Xiaomi are ranked first, second, third and fourth respectively based on the global shipment of smartphones' market share. Vivo and Oppo share the same rank at fifth. It cannot be denied that China's smartphones are getting stronger when four Chinese companies are ranked top five worldwide in terms of market share.

**Table 1.2: Top Five Global Shipment of Smartphones' Market Share**

<b>Quarter</b>	<b>2018Q3 (%)</b>	<b>2018Q4 (%)</b>	<b>2019Q1 (%)</b>
Samsung	20.3	18.8	23.0
Huawei	14.6	16.2	18.9
Apple	13.2	18.3	11.8
Xiaomi	9.5	6.7	8.9
Vivo*	8.3	6.9	7.4
Oppo*	8.4	7.9	7.4
Others	25.7	25.1	22.7
Total	100.0	100.0	100.0

Source: From Workman, D. (2019, March 26). Cellphone exports by country. *World's Top Exports*.

It happens that the Generation Y's consumer group are often being studied in a large-scale in market segmentation research. Thus, it is no surprise that most smartphone buyers in Malaysia are from the Generation Y group who are also more tech-savvy and rely more on technical devices than other generations (Shabrin et al., 2017). Generation Y also have experience of pre-digital life (Wood, 2018). Smartphones provide benefits such as their various uses which include providing knowledge and a source of entertainment. According to Digital News Asia (2013), Malaysia is a smartphone-savvy and not brand-conscious market in Asia. Malaysians emphasize more on the phone features and functionality rather than the smartphone brand or model. However, with the fast-growing economy and high demand of smartphones launching, many people are facing dilemma when purchasing a smartphone. Thus, it is crucial for a company to know the consumers' needs.

## **1.2 Problem Statement**

Malaysian Communications and Multimedia Commission (2017) found that the users of smartphone is rising continuously. The rate grew from 68.7% in 2016 to 75.9% in 2017. With the rising of the e-commerce era, it is no doubt that the demand of the smartphones is increasing as well. According to Statista Research Department (2019), the users of smartphone has been increasing from 2017 and it is forecasted that the amount of smartphone users will increase until year 2023. This shows that

there is a potential market accessible for Malaysia's smartphone manufacturers and distributors.

Besides, according to Statcounter (2019), Chinese mobile vendors have lower market shares compared to Samsung who continues its domination and Apple which is 25.99% and 18.99 % respectively as of July 2019. The Chinese mobile vendors, Oppo, Huawei, Xiaomi have the market share of 14.77%, 13.18%, and 5.68% respectively. Lenovo's market share is too low that no precise data is available for its market share. The market share of smartphones in Malaysia is slightly different from the global market share worldwide in Table 1.2. Huawei which is placed second worldwide is placed at fourth in Malaysia while Oppo which is placed sixth worldwide is being placed third in Malaysia. The inconsistency when comparing the worldwide ranking and the ranking of Chinese smartphone brands in Malaysia leads to having a doubt on which Chinese smartphone brand are more marketable in Malaysia, specifically among Generation Y.

There are past studies stated that Chinese brands are always considered of low quality, not up-to-date technology and low-cost products (Kreppel & Holtbrügge, 2012). Despite China being a leading manufacturer worldwide, consumers still perceived that China-made product are of poor and less quality (Sarwar, Azam, Haque, Sleman & Nikhashemi, 2013; Lew & Sulaiman, 2013). These negativities towards China-made products had led to market entry failures in the past. However, there are still people who would purchase China-made products as they are cheap and people tend to opt for a cheaper one despite knowing they will go faulty as they can purchase a new one at a low price. This explains why the purchasing behaviour and decision helps in China growing in its economy.

It makes sense to think that customers now prefer cheaper items despite its quality. However, will the people in Malaysia take other value in terms into consideration such as the usefulness and how easy to operate a product, specifically a Chinese brand smartphone? There are past studies studied on the elements which influence the Generation Y's smartphones purchasing intention which include factors like product features, subjective norms, brand name and convenience. Unfortunately, there are less past studies studying on the Technology Acceptance Model which includes perceived usefulness and perceived ease of use as smartphones is

considered as part of a technology (Rahim et al., 2016; Tran, 2018; Taivanjargal, Batbayar, Batlkhagva, Tumenbayar & Enkhtaivan, 2018). Similarly, past studies focuses more on an overall view of smartphones, meaning the smartphone brands are of various countries and not smartphone from a specific country (Rahim et al., 2016; Lau, Lam & Cheung, 2016; Wong, 2019). In this modern digital era where the global marketing is growing gradually, the perceptions of consumer towards the product country-of-origin might change from one to another new perspective. Thus, there is a need to study on Chinese brand smartphones as the growth of China's technology in getting more competitive. Moreover, it would be intriguing to investigate the perception of Generation Y towards Chinese smartphone brands to see how willing they are to purchase one and what are the aspects which will affect their purchasing intention towards Chinese smartphone brands.

## **1.3 Research Objectives**

This section will show the study's general objective followed by the specific objectives.

### **1.3.1 General Objectives**

This research seeks to study whether the factors, namely perceived usefulness, perceived ease of use, price, social influence and perceived quality will influence the purchase intention of Generation Y towards Chinese smartphone brands.

### **1.3.2 Specific Objectives**

1. To examine the influence of perceived usefulness on the purchase intention of Chinese smartphone brands.
2. To examine the influence of perceived ease of use on the purchase intention of Chinese smartphone brands.
3. To examine the influence of price on the purchase intention of Chinese brand smartphones.
4. To examine the influence of social influence on the purchase intention of Chinese smartphone brands.
5. To examine the influence of perceived quality on the purchase intention of Chinese smartphone brands.



## **1.4 Research Questions**

1. Is there any significant positive relationship between perceived usefulness and the purchase intention of Chinese smartphone brands?
2. Is there any significant positive relationship between perceived ease of use and the purchase intention of Chinese smartphone brands?
3. Is there any significant positive relationship between price and the purchase intention of Chinese smartphone brands?
4. Is there any significant positive relationship between social influence and the purchase intention of Chinese smartphone brands?
5. Is there any significant positive relationship between perceived quality and the purchase intention of Chinese smartphone brands?

## **1.5 Significance of Study**

It is hoped that this research will help in providing a better idea for various parties to comprehend the factors effectively which affect the Generation Y's purchasing intention towards Chinese smartphone brands. One of the importance of carrying out this study is that the consumers will get to realize that the Chinese brand smartphones differ from the past. They now, have the ability to challenge other leading brands in the smartphone market. Besides, Chinese smartphone are able to assist the users to economize more as they get to purchase a smartphone with same features as others at a cheaper price.

Besides, this study provides academicians and researches to fill in the gap as well as contribute to the literature who are interesting in doing research in this field. This research will get to provide the latest reference which can be referred for future studies on the relationship between the five independent variables (perceived usefulness, perceived ease of use, price, social influence and perceived quality) and the purchase intention of Chinese smartphone brands purchasing among Generation Y. Moreover, this research will contribute to policy makers in making sure that the regulatory requirements are strict enough when determining whether the Chinese smartphone brands comply with the standards set to avoid unforeseen circumstances from happening.

As it is common now for telecommunication companies such as Maxis and Digi to offer attractive packages that come along with a smartphone, this research will get to help the companies to understand the consumers' needs more. Instead of including smartphones like Samsung and Apple, the telecommunication companies can now attach Chinese smartphones as they are getting recognized by the public now. The variables studied might help other smartphone brands too as they know which elements to improvise. This is to attract more consumers.

## **1.6 Research Gap**

Although there are a lot of researches about the perception of consumers which affect the smartphone purchasing intention, there is a lack in researches which specifically focus on the purpose to purchase specifically, Chinese smartphone brands. Rahim, Safin, Law, Abas and Ali (2016) studies the elements which influence the university students towards smartphone purchasing intention which include the variables features of the product, influence of social groups and product sacrifice. On the other hand, Shahbrin et al. (2017) studied on the elements which include brand concern, social needs, social and others which affect the Generation Y smartphone purchasing decision. It is clear that these Malaysian studies studied on smartphones from around the world and not specifically Chinese brands smartphone.

Besides, recent journals' findings reviewed that the Technology Acceptance Model (TAM) is no longer important as people in today's digital era are said to have great intellect and ability to learn to use technology (Ismail, 2016; Mohammed, 2018). Some journals found out that perceived usefulness has no effect on purchase intention while some found perceived ease of use do not affect the purchase intention because of the high technology literacy in the 21<sup>st</sup> century that the users emphasize more on other factors when purchasing a smartphone (Haba, Hassan & Dastane, 2017; Martawilaga & Purwanegara, 2016). Therefore, this research hopes to find out whether both of the variable, perceived usefulness and perceived ease of use still have an impact on purchasing intention of Chinese brand smartphones or not. Overall, this study hopes to have the mentioned gap filled to enrich and contribute to the smartphone and TAM field more.

## 1.7 Chapter Layout

There are five chapters which comprises of introduction, literature review, methodology, data analysis and discussion with conclusion. The chapter layout is shown in-detailed below.

### Chapter One: Introduction

Chapter one presents the study background which explains the term Generation Y and the usage of smartphones, problems that contributes to the aim of carrying out this research, research objectives, research questions, the significance of the research which benefit various parties, research gap, chapter layout and a summary for chapter one.

### Chapter Two: Literature Review

The second chapter presents the previous reviews by past researches which are associated to the aspects of purchase intention of Chinese smartphones brands. The aspects are perceived usefulness, perceived ease of use, price, social influence and perceived quality. The five aspects and purchase intention which serves as the dependent variable will be used for the proposed conceptual framework. Lastly, the hypotheses development will be also be discussed based on the determined independent and dependent variables..

### Chapter Three: Methodology

The third chapter introduces the method used to carry out this research will be explained which consists of research design, research instruments, data analysis techniques and pilot test. An administered questionnaire survey will be used for this survey to collect data and later analysed using Statistical Project of Social Science Version 23 (SPSS v23) using different analysis such as descriptive analysis, Cronbach's alpha reliability analysis, Pearson correlation coefficient test and multiple linear regression. Before the actual research is survey is carried out, a pilot test will be run to ensure its reliability.

### Chapter Four: Data Analysis

The fourth chapter demonstrates the analysing of the data gathered. The data gathered such as respondents' demographic profile and their general information

will be exhibited in graphs and tables. The data from the analysis carried out such as descriptive analysis, Cronbach's alpha reliability analysis, Pearson correlation coefficient test and multiple linear regression will be tabulated. Lastly the hypothesis testing will be summarized.

#### Chapter Five: Discussion and Conclusion

The fifth chapter will show the general findings of the data analysed in chapter four by discussing them. Besides, the constraints of the research which include managerial implications and theory implications, recommendation for future research and a general conclusion will be shown as well.

### **1.8 Conclusion**

This chapter has outlined the overview of this study which guide the readers by providing the context of the study such as background of the statement and statement of problem. The research objectives and research questions are intended to lead this study towards the right direction. Next, the importance of research was discussed to highlight the contributions that this research can contribute to different parties followed by research gap which explained the different results obtained from various research and hope to have the gap to be filled in by this study. Lastly, this chapter aimed to show a precise introduction to the research's composition. The next chapter, chapter two will discuss the literature review based on the variables determined to understand the factors that affect the purchase intention of Chinese smartphone brands. Moreover, the proposed conceptual framework will be shown followed by hypotheses development.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

In the previous chapter, it provides an overview of this research by mentioning the objectives and purpose of this study. Chapter two provides relevant literature review which focuses on the discussion of past research where the independent variables, perceived usefulness, perceived ease of use, price, social influence and perceived quality and dependent variable, purchase intention can further support on the objectives made. Besides, a proposed theoretical framework which include independent and dependent variables will be elaborated followed by the development of hypotheses.

#### **2.1 Literature Review**

##### **2.1.1 Purchase Intention**

The possibility and desire of consumers to acquire an item or service in times to come is known as purchase intention (Richard, Lounsbury & David, 2013). Besides, it is mentioned that purchasing intention is the customers' pre-planning of purchasing specific products in the near future (Warshaw & Davis, 1985). The purchase intention will show the chances of consumers to purchase a product where the stronger the purchasing intention, the higher the consumers' intention to purchase the product (Schiffman & Kanuk, 1997). Zeithaml (1998) stated that purchase

intention also exposes one's desire to buy a product where the alternative options assessment depends on one's liking, knowledge and external influences. Thus, it can be said that purchase intention is like making a decision that observes the reasons to buy a product by the users or customers. The purchase intention of customers is a complicated process as it is related to the behaviour, perceptions and attitudes of the customers.

Moreover, Kotler (2000) also expressed that response behaviour can be forecasted by using purchase intention which is an ordinary efficacious measure. The purchase behaviour is a reason for users to gain access to a particular product. Purchase intention has also been studied as a focal construct to show consumers' purchasing behaviour in market research (Yang & Mao, 2014). It is also said that positive purchasing intention will affect consumers to have repurchase intention in the future (Pavlou & Gefen, 2004). Ghosh (1990) mentioned that purchase intention is an effectual tool to have the purchasing process forecasted. However, the purchase intention might change under different influences such as price or perceived quality.

Moreover, the willingness of consumers to purchase an item is reflected in his or her purchase intention (Schiffman & Kanuk, 2000). Before forming the purchasing intention, there will be an evaluation stage where the consumer ranks the brands of a particular product in mind. According to Dorsch, Grove and Darden (2000), the intention of the users to buy or use a product can be explained through a five-step process which involve knowing the need, search for accessible information, assessing the alternatives, buying the product and making the post-buying appraisal and brand choice. The purchase intention of consumers towards mobile phones also follows this traditional buying approach (Karjaluoto et al., 2005). Normally, the consumers will consider aspects such as brand name, product quality, price, function ability when they plan to purchase a smartphone (Tran, 2018).

In addition, marketers use purchase intention as a tool to predict their goods or services' sales (Armstrong, Morwitz & Kumer, 2000). Thus, marketers have great interest in knowing and understanding the purchase intention of their potential customers so they will be able to segment their market. The customers have different Chinese smartphone brand choices to fulfil their demands. Hence, consumers differ from each other in terms of preference and likings. Their purchase

intention might depend on the characteristics of the smartphones such as price, quality and how useful they are. The purchasing intention is also considered as a crucial dependent variable for evaluating effectiveness on various levels (Lee, Lee & Yang, 2017). Thus, it is crucial to study the variables such as perceived usefulness, perceived ease of use, price, social influence and perceived quality towards Chinese smartphone brands purchasing intention.

### **2.1.2 Technology Acceptance Model**

The motive of this study is to determine the aspects affecting Generation Y's to purchase a Chinese smartphone. The selected model used is the Technology Acceptance Model (TAM) to predict whether the users accept the system or not and their behaviour (Davis, 1989). This theory concluded that one's individual behaviour will be affected by perceived ease of use and perceived usefulness. In other words, the attitude is made up by an assessment of the perceived usefulness and the perceived ease of use which cause the people to acquire or decline information technology (Davis, 1989).

Besides, the TAM is the fittest theory when it comes to explaining the technology acceptance in the research of information system (Gefen, Karahanna & Straub, 2003). An example of the information system is a website which provide information to the users. It is clear that TAM is regarded as the most dominant theory in adopting technology. According to Fishbein and Ajzen (1975), TAM is based on the model of theory of reasoned action (TRA) which shows how attitude affects behaviour. This statement is also supported by Hongyao's (2013) finding where perceived usefulness and perceived ease of use of the information system will impact the behavioural intentions of the potential adopters to use the technologies. It is also said that perceived usefulness and perceived ease of use have no mediating effect towards technology, thus, it is not suitable to be a mediator (Ventakes, 1999).

Moreover, the TAM also stated that the technological product's usage depends on the intention to use, which then it also relies on the attitude towards it (Agrebi & Jallais, 2015). Davis (1989) developed two constructs for usefulness and ease of use which have become the information system acceptance prime motivators. The

perceived usefulness and perceived ease of use are hoped to be able to have an effect on individual's attitude on technology acceptance where both of the beliefs can explain the purpose of using the technology.

Antecedent studies has adopted the TAM to study the elements affecting smartphones purchasing intention (Lau, et al., 2016; Haba et al., 2017). Moreover, there are past studies which stated that perceived usefulness and perceived ease of use affect the consumers' purchasing intention (Ha & Stoel, 2008).

### **2.1.3 Perceived Usefulness**

The likelihood of the people to utilize or not to utilize a product until they trust it benefits them to accomplish their task better is known as perceived usefulness. In other words, it is the users' beliefs that a smartphone could assist the individuals to increase their communication and personal management performance (Davis, 1989). Perceived usefulness is also regarded as the perception of customers of the outcome gained after using or experiencing a product or system (Monzuwe, Dellaert & Rutyer, 2004).

Perceived usefulness is a factor which anticipate the behavioural intention of a new technology (Venkatesh, 2000). Franco and Roldan (2005) who stated that perceived usefulness together with behavioural or purchasing intention were related to each other and it was solid among goal-directed users. The perceived usefulness is found out to be influencing the Malaysia's young consumers adaptation on smartphone (Hong, Teh & Soh, 2014).

Besides, Yang, Yu, Zo and Choi (2015) concluded that perceived usefulness affect the intention to wear a wearable device as potential users want to fully utilize the watch device rather than to have fun or to receive pleasure from it. Thokchom (2012) stated that perceived usefulness do impact the consumer's purchasing intention to purchase a smartphone as the smartphone can improve the consumers' performance and its functions made the consumers' life easier. It is mentioned by Tan and others (2017) that perceived usefulness is a vital element which affect the purchasing intention in social media websites as it can enhance the users' purchasing



experience. It is also said that perceived usefulness affects women more than men (Wahid, 2007).

However, Ismail (2016) found out that perceived usefulness is not important towards the purchasing intention of smartphones as the users perceived that owning a smartphone shows prestige rather than understanding the full use or features of a smartphone. Habu and others (2017) also stated that perceived usefulness has no direct effect towards Malaysia's working professionals' smartphone purchase intention as consumers should perceive the usefulness of the smartphone before purchasing it. Ramayah and Ignatius (2005) mentioned that perceived usefulness is not a vital element when it comes to shopping online intention. It was a surprising result but it is believed that it is due to the type of products where people prefer the traditional method of purchasing when buying products such as household items. Perceived usefulness is also said not to have an impact on the intention to play online games as people play games just because they feel like doing so and not because they find it useful (Hsu & Lu, 2004).

Furthermore, Juniwati (2014) concluded no correlation exists between perceived usefulness and the intention to shop online. Although e-shopping is useful, but the students have no intention to do so. This is supported by Martawilaga and Purwanegara's findings (2016) who found out that perceived usefulness has no effect towards purchasing intention. This is because although the consumers found out that the product is useful to them but the usefulness is not the main priority which they consider when purchasing and thus, that aspect is not important to them. Mohammed (2018) in revealed that perceived usefulness does not affect Generation Z's smartphone purchasing intention. This is because purchase usefulness might not be relevant anymore as the benefits of using the technology in today's world is widely recognized.

#### **2.1.4 Perceived Ease of Use**

Normally, people of all age will try to avoid complexity. As smartphone is a technical product, consumers tend to prefer purchasing phones which are easy to use or operate (Rakib, 2019). Davis (1989) mentioned that perceived ease of use is the level where people are convinced that utilizing a technology could be effortless

or used with a minimum level of effort by the users. Perceived ease of use is also linked to problem-free, convenience, flexibility and less complexity (Davis, Bagozzi & Warshaw, 1989). In the terms of smartphone, usefulness can be referred as an extent to how the smartphone is providing its users to perform an action which they want such as searching something on the Internet or to take a picture using the smartphone's camera. Blau (1989) said that when an object is perceived to have an high ease of use, it gains trust from the users and have lower misunderstanding towards the product. Besides, perceived ease of use is when even if the users found that the application is practical, they may, simultaneously, perceived that the system is extremely complicated to be used and that the performance advantages are superseded by the attempt of using the application (Lau et al., 2016).

Davis (1989) and Ventakesh (2000) concluded that perceived ease of use is a vital factor of behavioural intentions to embrace a new technology. Teo (2001) deduced that users tend to use the technology if the system appeared to be easy to utilize and need less effort to learn or use. This is because consumers feel comfortable when they can operate a phone easily with minimum effort (Park & Chen, 2007). Tan, Goh, Wee and Yeow (2017) mentioned that perceived ease of use shows one's capability to identify the best products by comparing with other products' functions and perks. It is said that the perceived of use is high when one is able to use a product after using the product or reading the manual in a reasonable time length. Furthermore, it is found out that consumers are interested and tend to purchase a smartphone which involves less complexity in using (Uddin, Lopa & Oheduzzaman, 2014). Besides, Wahid (2007) stated that perceived ease of use affects women more compared to men. Thus, it is said that the more simple a technology is, the more people will prefer to use.

Moreover, previous studies suggested that convenience and perceived ease of use have vast effect in determining purchasing intention of consumers (Ting, Li, Patanmacia, Low & Ker, 2011; Suki & Suki, 2013). Hong, Teh and Soh (2014) deduced that perceived ease of use impacts Malaysia's young consumers greatly towards the smartphone adaptation. Lau and others (2016) found out that perceived ease of use is a strong predictor of purchase intention. Besides, Thokchom (2012) deduced that perceived ease of use affect the smartphone purchasing intention. This is because the smartphone purchased gets to improve the consumers' quality of life.

Perceived ease of use is also a vital element of consumers' purchasing intention in social media websites as the social media websites allows users to search for products' information easily (Tan et al., 2017).

However, in Haba and others' (2017) findings, the purchasing intention of smartphone is not impacted by perceived ease of use and consumer perceived value among Malaysian working professionals. This is because the working professionals of Malaysia do not value the smartphone functions' usability as whether it is effortless to manipulate or not. It is deduced that perceived ease of use does not affect computer self-efficacy (Chau, 2001). Juniwati (2014) mentioned that perceived ease of use has no means towards the online shopping intention as its respondent have no online shopping experience before due to no intention to do so. Besides, Mohammed (2018) from his study deduced that perceived ease of use does not impact the purchasing intention of Generation Z towards smartphones. This is because the factor perceived ease of use might not be relevant anymore. Nowadays, it is effortless to use a technology or the Internet.

### **2.1.5 Price**

Price acts as a crucial role in the customer purchase intention as the charges affect the customers directly (Phan & Mai, 2016). It is also defined as a sum of money that individuals are eager to trade for an item or service (Kotler & Armstrong, 2010). Besides, Phan and Mai (2016) stated that monetary value used by individuals to make a purchase for an item or service is also known as the product's price. Thus, it is said that price is a vital factor which influences consumers to make a purchasing decision (Shabrin et al., 2017). This is because some consumers might think it is valuable and worth it to purchase a product at a high cost. However, others might perceived that it is not worth the money paid for (Karen, Han, Benjamin, 2013). Nirushan (2017) mentioned that price determines whether one's product marketing is effective or not. While price acts as an aspect for the customers to form opinion on a product's quality and taste, it also acts as a barrier for the purchase intention.

In Kinney, Ridgway and Monroe's study (2012), it was found that consumers are less prone to purchase a product when the cost is higher. This proves that a negative relationship is present between high cost and purchasing intention. A research was

carried out on the effect of price and consumers' perception in purchasing Chinese products and the findings summarize that the correlation exists between price and consumer's perceptions towards purchasing Chinese products is positive (Sarwar et al., 2013). It is certain that consumers are price-sensitive, thus making China made products are deemed to be more affordable compared to other countries' products because of the low price strategies practice. Price is also often associated quality and usefulness where before finding out whether price affects the purchasing intention, it usually relies on the advantages which a smartphone can bring. When the quality

Furthermore, Xiao, Yang and Iqbal (2018) refer price as the consumers' overall assessments of whether the offered price of a product of a seller is reasonable and that customers are more likely to rely on different references to make a better judgement such as cost of goods, previous prices and competitors' prices when evaluating price fairness in order to make a purchasing decision. Hanaysha (2016) mentioned that brands put high efforts to exploit their business profits especially through their products or services pricing. Simultaneously, consumers also tend to look for the best deal or best priced products or services which delivers maximum values. Pricing comprises of various methods such as perceived-value pricing, promotional pricing and mark-up pricing (Kotler & Keller, 2012). It is suggested by Isabella (2012) that the value should be shown when there is a low markdown rate while percentage should be shown when the markdown rate is high. This is to encourage higher purchase intention among customers.

Besides, in Chen, Chen and Lin's (2016) and Sama and Jani's (2014) findings, it is said that the price of a smartphone is crucial in making a purchasing decision. Khan, Kulkarni and Bharathi (2014) also confirmed that price concern is an element which is studied by researches in determining the demand for smartphones. Price is also a vital factor when it comes to brand preference of smartphones especially among young consumers and people are willing to wait for the newly launched products with high prices to reduce before buying (Riyath & Musthafa, 2014). This is because middle and lower income consumers tend to expect price reduction before purchasing too (Riyath & Musthafa, 2014; Karjaluoto et al., 2005). Nirushan (2017) concluded that price affect the purchasing intention as customers are sensitive towards price where if the price is high, their purchase intention will drop.

Moreover, Karjaluoto and others (2005) mentioned that price is considered as one of the most crucial motives affecting the intention to purchase a smartphone. Individuals use price as an indication of the brand's quality which is also one of the important factors in purchasing intention (Kotler, Ang, Leong & Tan, 1999). However, in Malviya, Saluja and Thakur's (2013) studies, it is found that the consumers does not consider price as their biggest concern and they are prepared to buy a product despite the price. In Sing and Goyal's (2009) research, it is also found that that people from the age group 18-30 years old are less sensitive to price compared to people who are 50 years old and above who give emphasize strongly on price when purchasing a smartphone. Kim et al. (2005) findings exhibit price does not affect the purchasing intention. This might be due to the low perceived quality of the customers as when the customers are uncertain about the product purchased quality, it will affect the perceived price on purchasing intention.

The statement of price does not have an impact on purchasing intention is also proved by Urbany, Bearden, Kaciker & Borrero (1997). It is said that the price influences the purchasing intention only if when the customers are clear and certain about a product's quality. When the potential customers are not clear about a product's quality, there will be no effect of price towards purchasing intention. Karen et al. (2013) found out that price has the least impact and no significant relationship with purchasing intention as when a smartphone has good features, the consumers are ready to purchase it despite its high price. This is supported by Lazim and Sasitharan (2015) who claimed that although the price of smartphone is high, Malaysians are still eager to purchase one and the demand is increasing. In addition, Wong (2019) found out that price does not impact purchase intention as when purchasing a smartphone, users often compare the brands of smartphone by their functions rather than price. Lastly, it is found that price does not affect the purchase intention when taking personal factors into consideration such as prior purchase experience and perceived quality because users take those impacts more serious than price as they have already estimated that they can pay for the product (Bringula, Moraga, Catacutan, Jamis & Mangao, 2018).

### **2.1.6 Social Influence**

Kotler and Armstrong (2010) stated that family, friends, social roles and status often influence the consumer's behaviour and decision-making process. Rashotte (2007) stated that when a person's feeling, thought or attitude changed when influence by the society, it can be treated as social influence. This is why celebrity endorsement is becoming common which is used as a marketing strategy for smartphone companies as celebrities provides a kind of cultural meaning and the connection of it will then be transferred to the brand endorsed itself (Riyath & Musthafa, 2014). The reasoning for subjective norm is that people may choose to perform certain behaviours if they believe their referents think they should (Venkatesh & Davis, 2000). Butcher, Sparks and O'Callaghan (2002) emphasized on the positive correlation between social influence and purchasing behaviour. It is clear that social influence brings a meaning of connection or recommendation.

The influence of social influence has been increased throughout the years with the increase number of social network sites such as Facebook and Instagram. Those social media sites which have gained popularity have made them a growing interest subject in scholarly and practitioner worlds, making it important to understand the technology adoption and usage drivers (Qin, Kim, Hsu & Tan, 2011). Social influence also suggested that when other important individuals such as family members and friends approve of or support the behaviour, the decision makers tend to engage in the behaviour.

Besides, Ajzen (1991) found out that one has a more favourable attitude and stronger intention to purchase a product when their social groups approve their decision. Thus, in many previous studies, social influence is being studied as an element which influence the purchasing decision of users towards smartphones (Subari, Kassim & Mohamood, 2013). Bearden, Netemeyer and Teel (1989) claimed that users have two kinds of responsiveness towards social influence. The first kind is that users purchase an item just to impress the people around them and second, the users who have little knowledge towards a product try to seek for opinions and more information from others.

Khan and Rohi (2013) also found out that the youth are influenced by the family and friends' recommendations when it comes to smartphone purchasing. Moreover, social influence influences the smartphone purchasing intention as in today's world, everyone can create their social network online easily through social media (Rahim, et al., 2016). People can not only find various information on a single product but also reviews from various users. Suki and Suki (2013) mentioned that youth rely heavily on people surrounding them to do a smartphone purchasing. This is because consumers have a tendency to receive advices and opinions from their family and friends according to the smartphones' features and they are also most likely to get the same smartphones which their families and friends have used.

Goh et al. (2016) also mentioned that social influence impacted the repeat purchase intention greatly. Wong (2019) who studied the impact of social influence on smartphone purchasing intention found out that the relationship between them is significant as most of the respondents from the study is between the age of 18 and 25 and that age range of users are prone to using the smartphone to keep in contact with their friends through social media. This leads to whenever there are new models of smartphones being released and they saw their friends commenting on them or have one of the new smartphones, they will have the urge to buy one too. Moreover, social influence impact the university students to purchase a smartphone as it is assumed that it aids them to fit into their social groups (Arif, Aslam & Ali, 2016).

Furthermore, Malviya and others (2014) also found that social influence is an element which influences the purchasing decision of consumers towards smartphones. Chi, Yeh and Tsai (2011) supported the statement by stating that celebrities are associated with a particular product's value where they can provide a strong sense of recommendation which affect the consumers' choice and lead to increasing purchase intention. Run, Butt and Chung (2010) studied that direct and vicarious role models affect the consumers' purchasing intention. An example of direct role model would be teachers and vicarious role models, celebrities. It is said that entertainers have higher influential power than parents. Farzana (2012) stated that purchasing behaviour of consumers tend to be shaped by people around them especially family when purchasing high capital value products (Farzana, 2012). Lim and others (2013) found out that social influence do affect one's purchase

decision and hence, smartphone providers should offer better customer service and after-sale services in order to avoid dissatisfaction among customers which could lead to having negative word of mouth.

### **2.1.7 Perceived Quality**

The consumers' understanding on a general performance of a product which might or might not be different from the goal quality is known as perceived quality (Choy, Ng & Ch'ng, 2011). The goal quality is the technical and measurable aspects of the product. Lew and Sulaiman (2014) stated that quality is a subjective issue as different individuals defines quality differently. Besides, Keller (2008) mentioned that perceived quality is the understanding of customers of an item's overall quality, which also includes the purpose of that particular product comparing to other alternatives. However, perceived quality is often based on aspects such as the product specification. In terms of smartphones, the specifications includes the brand and performance.

Aaker (1991) mentioned that perceived quality is actually an all-inclusive or supremacy of a product and brand with respect to its intended purpose such a purchasing purpose. In Mostafa (2015)'s research, it is concluded that perceived quality is regarded as an essential element when expanding positive brand equity. Brand name is affected by quality because the less well-known products have significantly varying in quality (Sardar, 2012). Perceived quality is also evaluated by consumers in terms of extrinsic and intrinsic cues (Collins, 2003). Extrinsic cues include the packaging, price, advertising and peer pressure or also known as attributes which have relations with a product while intrinsic cues are the quality perceived through physical characteristics of a product such as flavour, size and colour. Commonly, consumers are more familiar with the extrinsic cues as they enable them to evaluate the products easily. The extrinsic cues are also more crucial in post-purchase contexts (Ko, Lee & Lee, 2011). Perceived quality is also considered to be the factor that is heavily affected when studying the impact of country-of-origin has on users' purchase decision.

The quality aspects of a smartphone such as sound, camera, speed and battery performance play a crucial part in purchasing intention of smartphone (Riyath &

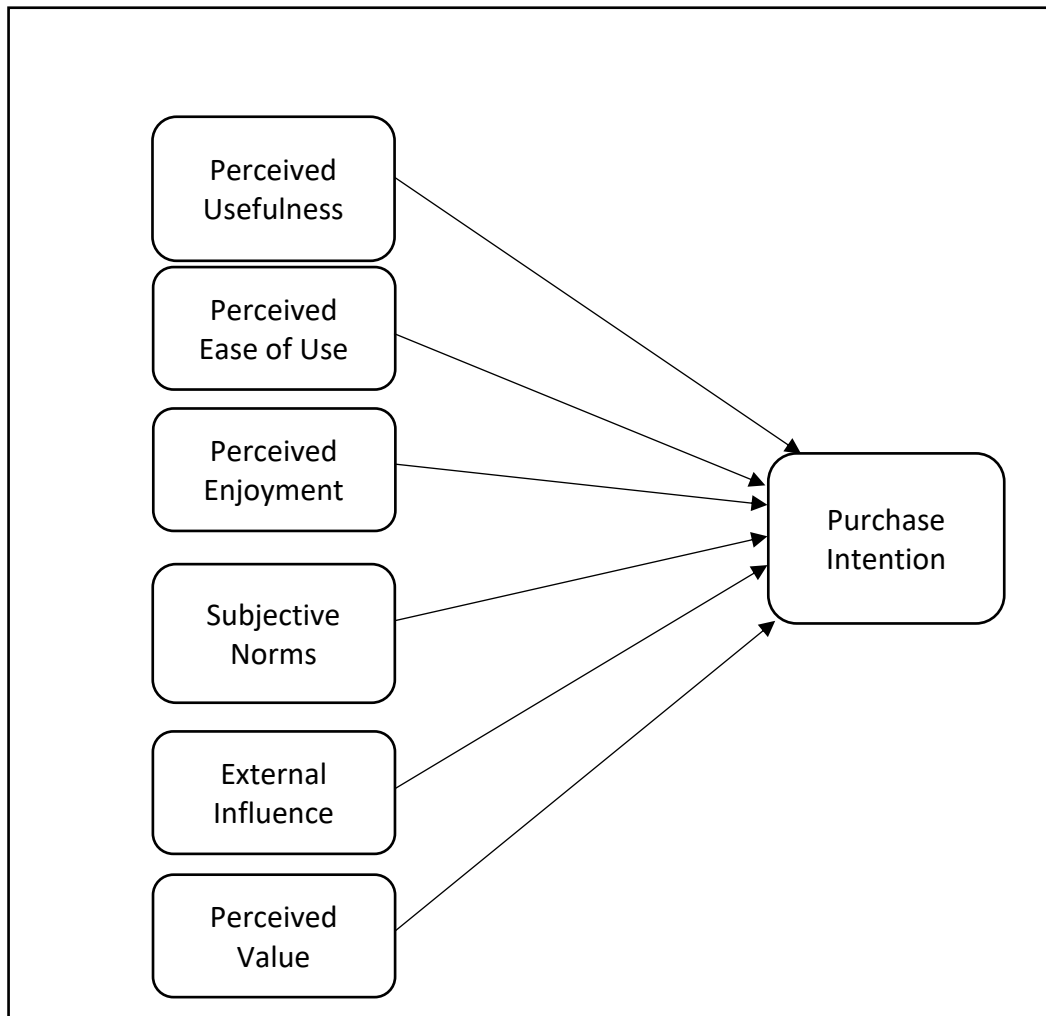


Musthafa, 2014). Perceived quality also includes a variety of design features which contributes to the size and weight of the smartphone, its material, colour, shape and interface features (Dung, 2012). Nowadays, the customers are demanding for more compatibility in their smartphone's user interface as the Millennials tend to enjoy life better where they want everything to be friendly user (Saif, Razzaq, Amad & Gul, 2012). This finding is supported by Juwaheer, Vencatachellum, Pudaruth, Ramasawmy and Ponnusami (2013) who found out that phone features and the lifestyle of the Millennials are factors that affect their smartphone selection. Lazim and Sasitharan (2015) also claimed that Malaysia's users are likely to be influenced by a smartphone's quality when purchasing one.

Furthermore, perceived quality is also an element which impact the purchasing intention of smartphones positively (Naing & Chaipoopirutana, 2014). In other words, perceived quality is a crucial factor which have an impact on the consumers' selection process where having high perceived quality towards the smartphone will increase the purchasing intention. Besides, Yunus and Rashid (2016) found out that perceived quality and purchasing intention of mobile phones brands from China has a significant relationship. A product's quality is a main factor which affects purchasing intention as it is an ongoing process of improvement where the constant change will increase a product's performance which will satisfy the customers' needs (Mirabi, Akbariyeh & Tahmasebifard, 2015). The quality of a product should be improved from time to time as when a brand's product has a good and better quality than its competitors, customer will be more likely to purchase it. Pongrujaporn & Kapasuwan (2015) also stated that perceived quality influence the purchasing intention. Customers usually have a perception of the product's quality and price before purchasing it and after using, the purchasing intention might increase or decrease due to the direct interaction with the product.

## 2.2 Review of Relevant Theoretical Models

Figure 2.1: Theoretical Model of Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment, Subjective Norms, External Influence and Perceived Value Impacting Purchase Intention.

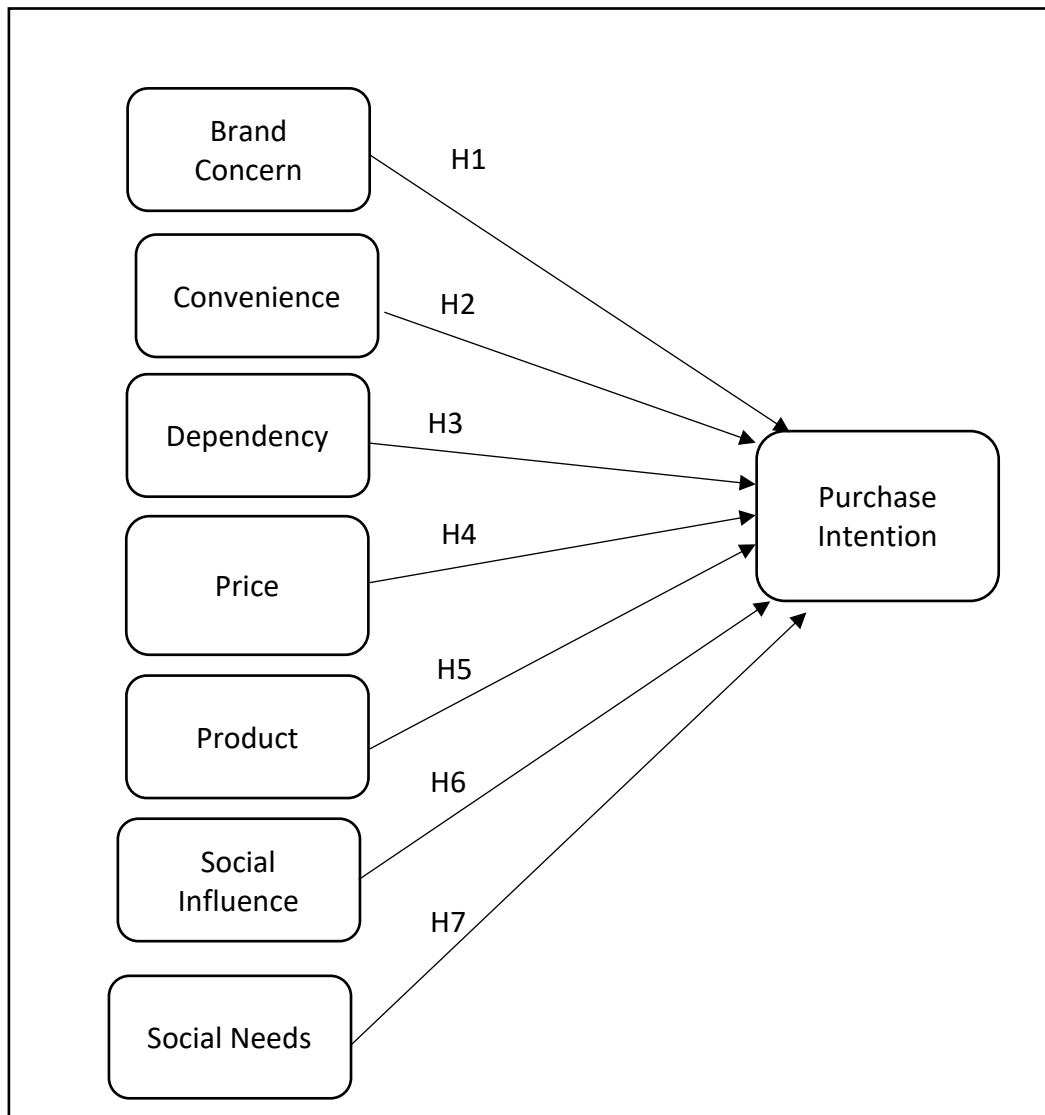


Source: From Lau, M. M., Lam, A. Y. C. and Cheung, R. (2016). Examining the factors influencing purchase intention of smartphones in Hong Kong. *Contemporary Management Research*, 12(2), 213-224.

The model shown above is by Lau, Lam and Cheung (2016) which is to study the elements influencing the smartphone purchasing intention in Hong Kong. 150 full-time secondary and undergraduate students in Hong Kong were used as the sample as they have high purchasing power or the students' parents are willing to purchase a smartphone for them. This study used a structured questionnaire survey and quantitative measures for statistical analysis. Out of the five variables, perceived

usefulness, perceived ease of use, perceived enjoyment, subjective norms, external influence and perceived value, only four factors have a significant impact on purchase intention excluding subjective norms and external influence.

Figure 2.2: Theoretical Model of Brand Concern, Convenience, Dependency, Price, Product, Social Influence and Social Needs Impacting the Purchase Intention.



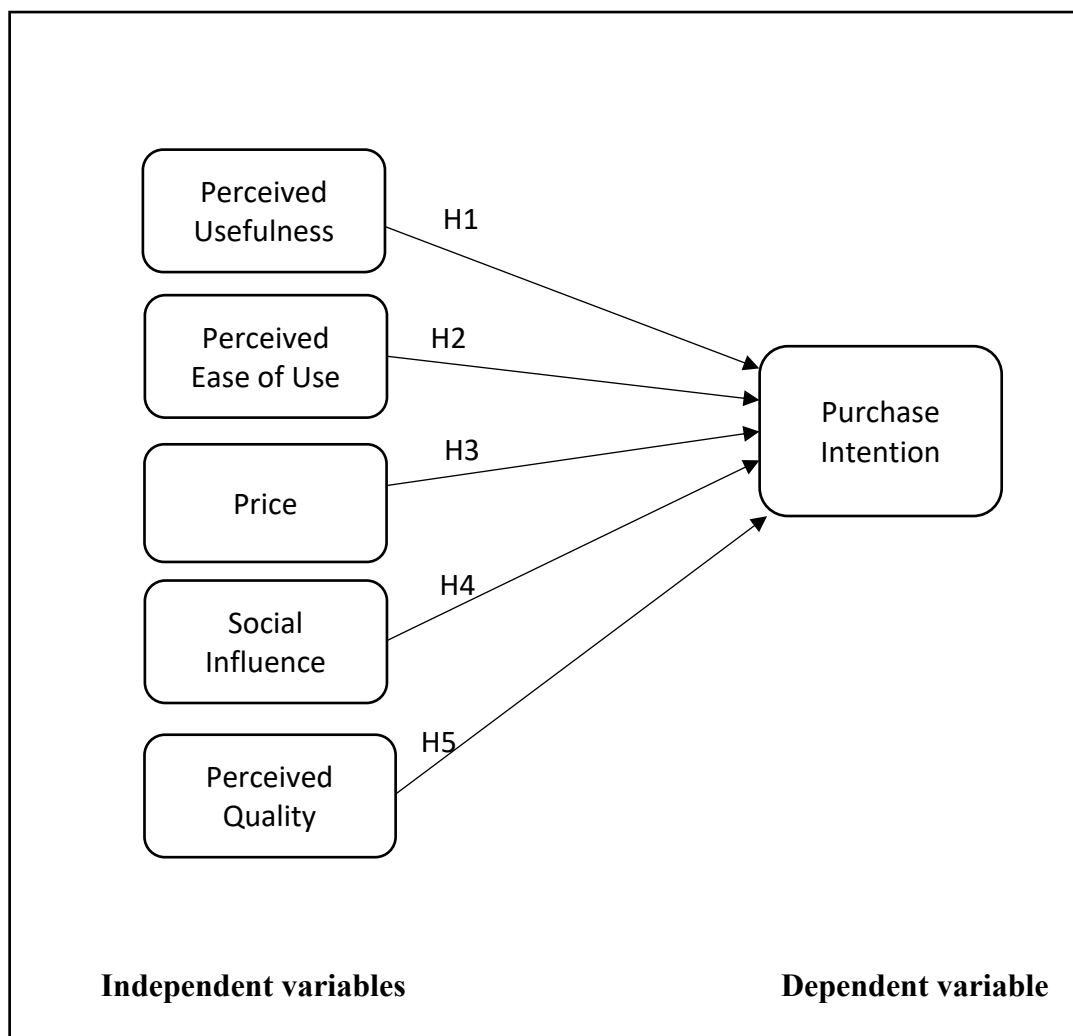
Source: From Shabrin, N., Khandaker, S., Kashem, S. B. A., Chan, K. H., and Susila, T. (2017). Factors affecting smartphone purchase decisions of Generation-Y. *Journal of Contemporary Issues in Business and Government*, 23(1), 47-65.

The model shown above is by Shabrin and others (2017) which studies the elements impacting the smartphone purchasing intention among Generation Y. An amount of 152 respondents were used as the sample size in Kuching, Malaysia. Generation Y were used as the sample as they grew up in the digital world and have different

beliefs and ideologies from other generations. Out of the seven variables, brand concern, convenience, dependency, price, product, social influence and social needs, only three factors which are social influence, product feature and brand image showed significant influence on the purchase intention of smartphone positively.

## 2.3 Proposed Conceptual Framework

Figure 2.3: Conceptual Framework of the Factors Affecting the Purchase Intention towards Chinese Smartphone Brands



Note. Developed for research

A conceptual framework was being proposed and shown in Figure 2.3. The framework is extracted and modified from Lau et al. (2016) and Shabrin et al. (2017) work. Besides, this framework consisted of five independent variables which

included perceived usefulness and perceived ease of use from the Technology Acceptance Model followed by price, social influence and perceived quality. On the other hand, purchase intention served as the dependent variable. Thus, the conceptual framework of this research consisted of five hypotheses which are to be tested.

## **2.4 Hypotheses Development**

The below are the hypotheses developed for the research.

### **2.4.1 Perceived Usefulness and Purchase Intention**

Perceived usefulness is the beliefs of users that a smartphone is able to help individuals to enhance their communication, entertainment and personal management of activities performance (Davis, 1989). TAM addressed perceived usefulness as a main factor that predicts a new technology's purchasing intention (Franco & Roldan, 2000). Thokchom (2012) also deduced that perceived usefulness impacts the purchasing intention of consumers' to purchase a smartphone. This is because the smartphone enables the consumers' performance to be enhanced and its functions made the consumers' life easier. This assertion is supported by Hong et al. (2014) who concluded that perceived usefulness influenced Malaysia's young consumers to purchase and adapt a smartphone. Moreover, Tan et al. inferred that perceived usefulness is a crucial element which have an impact on the purchase intention in social media websites as it enhances one's purchasing experience. The hypothesis relationship is developed as follows:

H1 : There is a significant positive relationship between perceived usefulness and purchase intention of Chinese smartphone brands.

### **2.4.2 Perceived Ease of Use and Purchase Intention**

When users are convinced that utilizing a technology is trouble-free, it is said that they have a certain extent in perceived ease of use (Davis, 1989). Occasionally, although it is expected for a technology to be practical to accomplish a task

concurrently, consumers may assume that the technology is extremely complicated to be used. Perceived ease of use is also a vital element of purchasing intention to adopt new technology (Davis, 1989; Venkatesh, 2000). Thokchom (2012) stated that perceived ease of use impacts the purchasing intention of smartphone significantly as the smartphone purchased gets to enhance the consumers' life quality. Uddin et al. (2014) concluded that consumers have higher purchase intention when they found less complexity in using. When users are able to use a product after using it or reading the manual in a short term, it is said that they will have a high perceived of use which leads to having purchasing intention. The hypothesis relationship is developed as follows:

H2 : There is a significant positive relationship between perceived ease of use and purchase intention of Chinese smartphones brands.

### **2.4.3 Price and Purchase Intention**

Riyath & Musthafa, (2014) mentioned that a strong positive relationship is present between the users' perceived price and their purchasing intention. The consumers' perceived price is regarded as their perception on whether the brand of a product has good quality or not. Nirushan (2017) concluded that one's product marketing effectiveness can be viewed through its price. The price enables user to form an opinion towards the particular and if the opinion is positive, the users will have a high purchase intention. Moreover, Kinney et al. (2012) found that when a product costs a lot, it demotivates the users to have purchasing intention. Price is also used by many consumers to show the brand's quality which is also an important factor contributing to purchase intention (Kotler et al., 1999). Karjaluoto and others (2005) mentioned that price is also regarded as a crucial factor impacting the purchase intention of a smartphone. The hypothesis relationship is developed as follows:

H3 : There is a significant positive relationship between price and purchase intention of Chinese smartphone brands.

#### **2.4.4 Social Influence and Purchase Intention**

Social influence shapes an individual's behavioural intention which means one's intention is influenced by how others perceive and comment about it (Davis, 1989). Social influence is an element being studied which affect the purchasing decision of users towards smartphones (Khan & Rohi, 2013). Suki and Suki (2013) mentioned that the young generation rely heavily on people around them such as family and friends in order to purchase a smartphone. They are most likely to buy the same smartphones which their families and friends have used. Arif et al. (2016) also concluded that users are expected to purchase a smartphone because they want to fit in well into their social groups better. This is supported by Wong (2019) who stated that as nowadays, users tend to keep in contact with their peers using social medias, thus it is likely for them to purchase a smartphone. The hypothesis relationship is developed as follows:

H4 : There is a significant positive relationship between social influence and purchase intention of Chinese smartphones brands.

#### **2.4.5 Perceived Quality and Purchase Intention**

Bredahl (2003) refers perceived quality as consumers' expectation for quality when purchasing stuffs based on their experience and gathered knowledge which later, will influence their purchasing intention. Yunus and Rashid (2016) stated that perceived quality impacts the mobile phone purchasing intention positively. In other words, the better the product quality perceived by the users, the higher the purchase intention will be. Besides, Pongrujaporn & Kapasuwan (2015) also stated that perceived quality influence the purchasing intention as customers usually have a perception of the quality and price of a product before purchasing it and after using, the purchasing intention might increase or decrease due to the direct interaction with the product. Mirabi et al. (2015) concluded maintaining quality is an ongoing process of improvement and when users perceived and being convinced that a product has a good quality, their purchase intention will increase. The developed hypothesis relationship is as follows:

H5: There is a significant positive relationship between perceived quality and purchase intention of Chinese smartphones brands.

## **2.5 Conclusion**

A lot of researchers had proven that the selected independent variables which are perceived usefulness, perceived ease of use, price, social influence and perceived quality have great impact on purchasing intention. The conceptual framework was developed to explore the independent and dependent variables relationship. Besides, the methodology used to analyse the relationship between the independent and dependent variable will be discussed in chapter three.



## **CHAPTER 3**

### **METHODOLOGY**

#### **3.0 Introduction**

The literature review on every variable and hypotheses development which were discussed in chapter two will be further explained in chapter three on how to determine their connection or relationship. Chapter three aims to explained the precise procedures and methods used to collect precise and appropriate information for the research. This chapter consists of design of research, collection of data, sampling design, research instrument, design of questionnaire, data processing and pilot test which is conducted before the actual research survey.

#### **3.1 Research Design**

Research design refers to a comprehensive idea for carrying out a study (Collis & Hussey, 2003). Research design is also regarded as an overall view on how to find solutions for the research questions. Besides, the research design contains the objectives which are gathered from the research questions. This research is a descriptive research where it give chances to the researchers to make use of the quantitative data to find the features of the respondents being studied. The quantitative approach will be used to design this study by using conceptual frameworks from previous literature (Zikmund, 2003).

## **3.2 Data Collection**

Generally, data comprises of primary and secondary data. Primary data are those collected by researchers for the first time for a particular research while secondary data is data which are gathered previously for some other purposes (Stevens, Wrenn, Sherwood & Ruddick, 2005). The primary data gathered for this study through the self-designed questionnaires are handed out through email and completed by the respondents as it is convenient (Saunders et al., 2009).

### **3.2.1 Primary Data**

The collection of data particularly for the research being studied is known as primary data (Saunders et al., 2009). Questionnaires that are administered electronically using the Internet is also known as internet-mediated questionnaires. Quantitative research will be implanted in this research to determine the elements which impact the Chinese brand smartphones purchasing intention. Besides, it can test the hypotheses and quantifies the data gathered from the questionnaire which get to answer the research questions. The sample and the size will be determined followed by the designation of questionnaire which is carefully adopted from Lau et al. (2016), Koliby and Rahman (2018), Shabrin et al. (2017) and Vo and Nguyen (2015) as the items are brief, clear and relatable.

## **3.3 Sampling Design**

The procedure of collecting data from an entire population of an attainable size is called sampling (Saunders et al., 2009). The whole population refers to the groups that share some habitual sets of attributes. Furthermore, sampling is required when it is impossible to collect data from the entire population because of time and financial restrictions. Sampling also provide various methods that enable to reduce the data amount needed to be collected and sample obtained.

### **3.3.1 Target Population**

The objective of this study is to explore the perception of Generation Y's towards Chinese smartphone brands. Therefore, the targeted respondents of this research are from Generation Y who are born from year 1981 to 1996 and who are willing to purchase a Chinese brand smartphone whether now or soon (Jirasevijinda, 2018; Wood; 2018; Dimock, 2019; Wood, Becker; 2019).

### **3.3.2 Sampling Frame and Location**

Saunders and others (2009) stated that the outline of the total cases in the population where the sample will be drawn is known as sampling frame. In other words, it is the representatives from the population. 150 people from the Generation Y will be the targeted population for this research. The questionnaire are randomly distributed in Klang Valley.

### **3.3.3 Sample Size**

Sometimes, it is proper to pick a sample based on the knowledge of a population (Babbie, 2016). 150 respondents who are categorized in the Generation Y or people who are born from 1981 to 1996 will be selected using convenience sampling as they are selected because of the convenient accessibility and judgemental sampling because of their age. The smallest amount of sample size can be 150 when considering models that contain seven or fewer constructs (Hair, Black, Babin & Anderson, 2010). In this research, there are six constructs which consist of five independent variables and one dependent variable. Generation Y will be chosen because they are considered the most tech-savvy of all current generations where they rely more on technical devices than other generations and they have higher spending power (Smith, 2017). Besides, most of the Generation Y have already started working, if not continuing with their postgraduate studies.

### **3.3.4 Sampling Technique**

Sampling techniques comprises of both probability and non-probability sampling (Churchill & Iacobucci, 2009). Any method of sampling which uses random

selections is called probability sampling while non-probability sampling is a sampling technique group which assists the researchers to select units from a population which they are interested to look into. In this study, two non-probability samplings which are the convenience sampling and judgemental sampling will be used. Samples which are picked at the researcher's convenience are known as convenience sampling (Hair, Bush & Ortinau, 2003). This is often done as the research is conducted and is mostly used for research which involve students or people in public places. Judgemental sampling is used when participants are picked because the researcher feels that they will get to achieve the research's necessities (Hair et al., 2003).

### **3.4 Research Instrument**

#### **3.4.1 Design of Questionnaire**

The main instrument of the data collection in this study will be a self-administered questionnaire. Questionnaires are suitable for study that requires a few types of information (Wray & Bloomer, 2006). Besides, it benefits the study as it can target larger samples and not to forget, more cost and time-saving than interviews. Riazi (2016) stated that researchers should put in effort to either construct the questionnaires or to adopt the available ones which are closely related to the construct addressed in the study. The instrument used is adapted and modified from past studies, mainly from Davis (1989).

There will be three sections in the questionnaire which use close-ended questions as a short answer with no possibility to expand is a decent method to gather accurate data (Wray & Bloomer, 2006). The first section, section A requests on their intention to purchase a Chinese smartphone followed by section B which contains questions on the factors which influence the Generation Y's purchasing intention towards Chinese smartphones and the third section requests the respondents' personal data and demographic background. All of the questions will be divided into five parts, mainly on perceived usefulness, perceived ease of use, price, social influence, perceived quality and purchasing intention.

Table 3.1: Source of Questionnaire

Variables	Sample of items	Adopted from
Perceived Usefulness	<ol style="list-style-type: none"> <li>1. Chinese smartphones help in improving my learning and work.</li> <li>2. Chinese smartphones help in strengthening the link between people (to communicate).</li> <li>3. Chinese smartphones helps in effective time management.</li> <li>4. Chinese smartphones features enable me to accomplish tasks more quickly.</li> </ol>	Lau et al. (2016)
Perceived Ease of Use	<ol style="list-style-type: none"> <li>1. Chinese smartphones have a user-friendly interface.</li> <li>2. I find it easy to get the Chinese smartphone to do what I want to do.</li> <li>3. Interacting with a Chinese smartphone requires a lot of mental effort.</li> <li>4. I need to consult the user manual often when using a Chinese smartphone.</li> <li>5. Overall, I find Chinese smartphones are easy to use.</li> </ol>	Koliby & Rahman (2018)
Price	<ol style="list-style-type: none"> <li>1. I prefer purchasing a Chinese smartphone for a high price.</li> <li>2. I prefer purchasing a Chinese smartphone for a reduced price.</li> <li>3. I think Chinese smartphones are expensive.</li> <li>4. I think the price is an important factor in judging the quality of a Chinese smartphone.</li> <li>5. I consider the price mainly when I decide to buy a Chinese smartphone.</li> </ol>	Shabrin et al. (2017)

Social Influence	<ol style="list-style-type: none"> <li>1. I feel like buying a new Chinese smartphone when my family and friends show their new Chinese smartphones to me.</li> <li>2. I usually consult my family or friends before buying a new Chinese smartphone.</li> <li>3. I want to have a high specification Chinese smartphone as my family/friend does.</li> <li>4. My family/friend always persuades me to buy the same Chinese smartphone/brand as theirs.</li> </ol>	Shabrin et al. (2017)
Perceived Quality	<ol style="list-style-type: none"> <li>1. I think quality is the prior criteria which I consider when purchasing a Chinese smartphone.</li> <li>2. Chinese smartphone brands are reliable brands.</li> <li>3. Chinese smartphones have excellent features.</li> <li>4. Chinese smartphone brands have good quality.</li> </ol>	Vo & Nguyen (2015)
Purchase Intention	<ol style="list-style-type: none"> <li>1. I search for information about Chinese smartphones on regular basis.</li> <li>2. I always discuss about Chinese smartphones with my friends and family.</li> <li>3. I will consider the brand of the Chinese smartphone before I purchase it.</li> <li>4. I will consider the price of the Chinese smartphone before I purchase it.</li> </ol>	Shabrin et al. (2017)

Note. Developed for research

### **3.4.2 Measurement Scale**

The research questionnaire will be using nominal and interval scale to measure. Nominal scale is used to differentiate the categories of a given variable such as genders and religions (Saunders et al., 2009). Besides, the nominal scale will be used to differentiate categories such as gender, smartphone brand which the consumer intend to purchase and considered price range when purchasing a Chinese smartphone.

The Likert-style rating scale is referred to how strongly a respondent agrees or disapprove towards a question and normally, the scale is a five-point rating scale (Saunders et al., 2009). A five-point Likert-style rating scale will be applied on the independent and dependent variables in this study's questionnaire. The alternative options are strongly disagree, disagree, neutral, agree and strongly agree.

## **3.5 Data Processing**

The objective of data processing is to transfer the raw data into the computer system to obtain useful information for the research (Hair, Bush & Ortinau, 2003). The data preparation process is crucial as it improves the quality and consistency of the findings which resulting in better managerial decision. Data processing comprises of checking, editing, coding, transcribing, cleaning and analysing the data.

### **3.5.1 Data Checking**

Data checking includes picking out or excluding unacceptable and inappropriate answered questionnaires due to errors made by the respondents. If data checking is done, the problems arise from the questionnaires can be identified at the earliest possible moment and corrective actions can be made after the pilot test is completed before the formulation of actual questionnaires.

### **3.5.2 Data Editing**

Data editing is a process where the errors found from the questionnaire are edited and corrected to improve its precision and accuracy (Zikmund, 2003).

### **3.5.3 Data Coding**

Coding of data is the procedure where the data is transformed into variable by numbering them and later on interpret, categorize, record and transfer the data into the data storage unit (Zikmund, 2003). The numerical code assigned to the questionnaire are through computer or by self-tabulation by using the Statistical Project of Social Science Version 23 (SPSS v23) to analyse the collected information.

### **3.5.4 Data Transcribing**

Malhotra (2006) stated that data transcribing is a step which transfers original state coded data to another state. In other words, it is the transferring of the data obtained from the questionnaires to the SPSS v23. The collected data which is transferred to the SPSS v23 will be processed.

### **3.5.5 Data Cleaning**

Data cleaning is done to detect and resolve the errors in coding when being transferred to the computer system. After the data have been entered into the computer system, it is checked whether there are any errors occurred. This process is important as inaccurate or inconsistent data determined can be either substituted or removed.

## **3.6 Data Analysis Techniques**

In data processing, questionnaires are checked to ensure no questions which will create confusion and grammar errors. After collecting filled questionnaires, questionnaires which have inaccurate information will be eliminated to make sure



the quality of the research is maintained. All valid data gathered will be later move into the computer using SPSS v23 to obtain the results. Entering the data using SPSS benefits more than other options as it prevents excessive labour and has a higher reliability when it comes to recording and analysing the data. (Riazi, 2016). The SPSS v23 is used to examine the reliability, correlation and multiple linear regression which will be further explained in the study.

### **3.6.1 Descriptive Analysis**

The demographic data gathered will be analysed using descriptive analysis. Saunders et al. (2009) mentioned that the individual variable's results can be presented through frequency distribution be it in a table, pie chart or others for easier interpretation. The researcher will be able to identify the respondents' information effortlessly when using descriptive analysis.

In order to meet normality assumptions, the kurtosis and skewness measurements are used (Kline, 2005). The kurtosis and skew can be analyzed through descriptive statistics. The kurtosis measurement helps in identifying if a curve is normally or abnormally shaped. The acceptable values of kurtosis range from -10 to +10 while the skewness' values range from -3 to +3. It is also said that if the skewness is between -0.5 and 0.5, the data is fairly symmetrical while between -1 and between 0.5 and 1, the data is moderately skewed. If the skewness value is less than -1 or larger than 1, the data is said to be highly skewed.

### **3.6.2 Cronbach's Alpha Reliability Analysis**

When a study has two or more construct indicators, their reliability can be measured using Cronbach's Alpha or known as the internal consistency measurement. The coefficient alpha values range from zero to one. Individual item with the value of less than 0.6 is regarded as poor. A Cronbach's Alpha of greater or equal to 0.6 is interpreted as acceptable (Stanley, Ridley, Olds & Dollman, 2014). Table 3.2 shows the Cronbach's Alpha interpretation scale (Hair, Anderson, Tatham & Black, 1998).

**Table 3.2: Cronbach's Alpha Interpretation Scale**

Alpha Coefficient Range	Strength of Association
< 0.6	Poor
0.6 to < 0.7	Moderate
0.7 to < 0.8	Good
0.8 to < 0.9	Very good
$\geq 0.9$	Excellent

Source: From Hair, J., Anderson, R, Tatham, R., and Black, W. (1998). *Multivariate data analysis*, (5<sup>th</sup> ed.). USA, NJ: Prentice Hall.

### 3.6.3 Pearson Correlation Coefficient Test

The relationship strength of the variables will be measured using the Pearson correlation coefficient test, *r*. The coefficient value will decide how significant the relationship of the variables tested. Besides, the Pearson correlation coefficient can be ranging from values of +1 to -1. If the value is 0, it shows no relation between the two variables is formed. The relationship between independent variables and the Generation Y's purchasing intention of Chinese smartphones will be tested in this study. The outcome is crucial as it helps the Chinese smartphone brands' industry to further comprehend the Generation Y's purchasing intention and to improve their business strategies. Table 3.3 exhibits the rules of thumb about correlation coefficient (Hair, Money, Samouel & Page, 2007).

**Table 3.3: Rules of Thumb about Correlation Coefficient**

Coefficient Range	Strength of Association
$\pm 0.91$ to $\pm 1.00$	Very strong
$\pm 0.71$ to $\pm 0.90$	High
$\pm 0.41$ to $\pm 0.70$	Moderate
$\pm 0.21$ to $\pm 0.40$	Small but definite relationship
$\pm 0.00$ to $\pm 0.20$	Slight, almost negligible

Source: From Hair, J. F., Money, A., Samouel, P., and Page, M. (2007). *Research methods for business*. New York: John Wiley & Sons, Inc.

### 3.6.4 Multiple Regression Analysis

Multiple regression is similar to simple linear regression in terms of technique and fundamental concepts (Neelankavil, 2007). In other words, multiple regression is an extension of the simple linear regression. The multiple regression is used to model the linear relationship between the numerous independent variables and dependent variable. Moreover, it can determine the most significant impact of an independent variable on the dependent variable. The independent variables are perceived usefulness, perceived ease of use, price, perceived quality and subjective norms. Therefore, the purchasing intention will be predicted by using these five independent variables. The multiple regression equation is shown below.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

Whereby,

Y: dependent variable

X: independent variable

$\beta_0$ : y-intercept

### 3.7 Pilot Test

A small-scale test is used to test whether the components of the main study can work together well before using on larger scale (Lancaster, 2015). It is known as pilot test. The aim of this pre-testing is to examine whether the data obtained from the respondents are reliable and valid, and to know if there are errors existing in the questionnaire' questions. A quantity of 40 sets of questionnaire were distributed for the pilot test. The Pearson Correlation coefficient test is run to obtain the reliability level of the pilot test is. Table 3.4 exhibits the results obtained.

Table 3.4: Results of reliability analysis for pilot test

Variables	Cronbach Alpha's	No. of items
Perceived Usefulness	0.830	4
Perceived Ease of Use	0.828	5
Price	0.709	5
Social Influence	0.769	6
Perceived Quality	0.785	6
Purchase Intention	0.715	8

Note. Developed for research

Cronbach's Alpha value that is less than 0.60 is considered as poor and it is of acceptable level if the range is from 0.60 to 0.70 (Sekaran & Bougie, 2010). Based on Table 3.4, it shows that the Cronbach Alpha's of all the independent and dependent variables are above 0.7. The highest score of the reliability test among the variables is 0.830 which is perceived usefulness with four items followed by perceived quality with an alpha coefficient value of 0.828 with five items. As both of the values are in the range of 0.8 to <0.9, the strength of association is regarded as good. Moreover, price, social influence and perceived quality have an alpha coefficient value of 0.709, 0.769 and 0.785 with five, six and six items respectively followed by the dependent variable, purchase intention has a value of 0.715. All four readings are in the range 0.7 to <0.8. Thus, they are said to have a good strength of association.

Lastly, all variables in the pilot test have the Cronbach's alpha values of 0.60 and above which indicate that all constructs are reliable (Stanley et al., 2014).

### **3.8 Conclusion**

This chapter highlighted the methodology details which comprises of the research design, collection of data, sampling design, research instrument, pilot test and data analysis techniques. The questionnaires will be distributed and the data obtained will be analysed in chapter four.

## **CHAPTER 4**

### **DATA ANALYSIS**

#### **4.0 Introduction**

The method on collecting data for this research which is primary data by using administered questionnaires mentioned in chapter three is carried out and the results obtained will be discussed in chapter four. The SPSS v23 is used to analyse the all the 150 respondents' data gathered. The descriptive analysis, scale measurement, reliability analysis, Pearson correlation coefficient and multiple regression will be presented to find the relationship between perceived usefulness, perceived ease of use, price, social influence and perceived quality and purchase intention.

#### **4.1 Descriptive Analysis**

In this research, the survey conducted had collected 150 copies of questionnaires filled by Generation Y respondents. All the 150 questionnaires will be used in this study to further analyse. The target respondents who has the purchasing intention to purchase a Chinese brand smartphone are presented such as the target respondents' demographic information which includes gender, age range, highest education obtained and income status.

## 4.1.1 Respondents' Demographic Profile

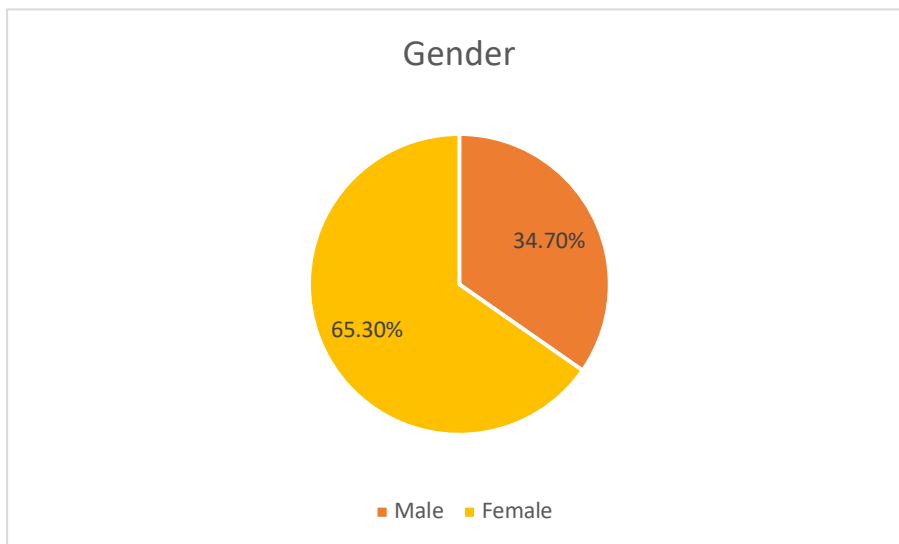
### 4.1.1.1 Gender

Table 4.1: Gender Group (n=150)

Gender	Frequency	Percent (%)	Cumulative Percent (%)
Male	52	34.0	34.7
Female	98	65.3	100.0
Total	150	100.0	

Note. Developed for research

Figure 4.1: Gender Group



Note. Developed for research

The respondents' gender distribution is represented in Table 4.1 and Figure 4.1 which show that there are 150 of respondents in total. The respondents consists of 52 (34%) males and 98 (65.3%) females.

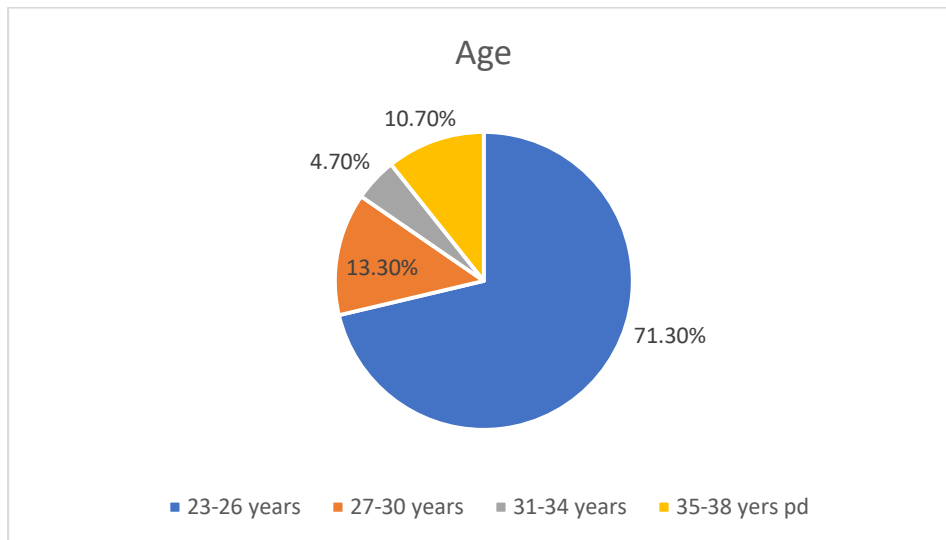
### 4.1.1.2 Age Group

Table 4.2: Age Group

Age Range	Frequency	Percent (%)	Cumulative Percent (%)
23-26 years old	107	71.3	71.3
27-30 years old	20	13.3	84.7
31-34 years old	7	4.7	89.3
35-38 years old	16	10.7	100.0
Total	150	100.0	

Note. Developed for research

Figure 4.2: Age Group



Note. Developed for research

Table 4.2 and Figure 4.2 show the respondents' age where the majority are of the age between 23 - 26 years old which consist of 107 respondents (71.3%) followed by the age group of 27 – 30 years old and 35-38 years old with the amount of respondents of 20 (13.3%) and 16 (10.7%) respectively. Only 7 (4.7%) respondents are of the age group of 31-34 years old.



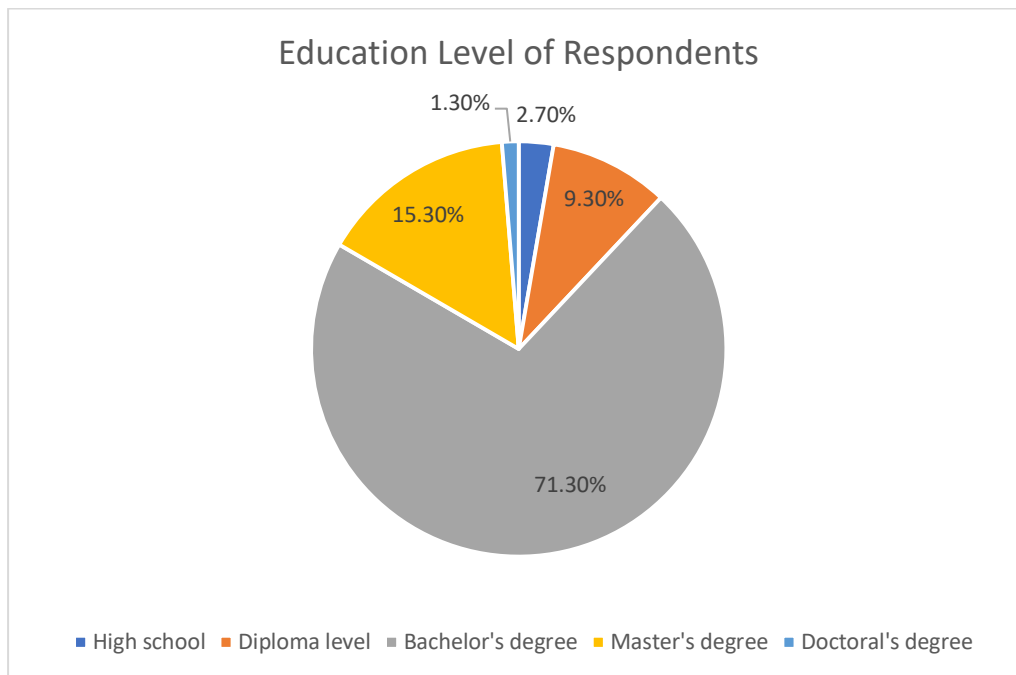
### 4.1.1.3 Education Level

Table 4.3: Education Level

Education Level	Frequency	Percent (%)	Cumulative Percent (%)
High school	4	2.7	2.7
Diploma level	14	9.3	12.0
Bachelor's degree	107	71.3	83.3
Master's degree	23	15.3	98.7
Doctoral's degree	2	1.3	100.0
Total	150	100.0	

Note. Developed for research

Figure 4.3: Education Level



Note. Developed for research

Table 4.3 and Figure 4.3 exhibit the respondents' education level in the research. 4 respondents (2.7%) graduated from high school while 14 respondents (9.3%) are of diploma level. Besides, 107 respondents (71.3%) hold a Bachelor's degree, 23 respondents (15.3%) hold a Master's degree and 2 respondents (1.3%) hold a Doctoral's degree.

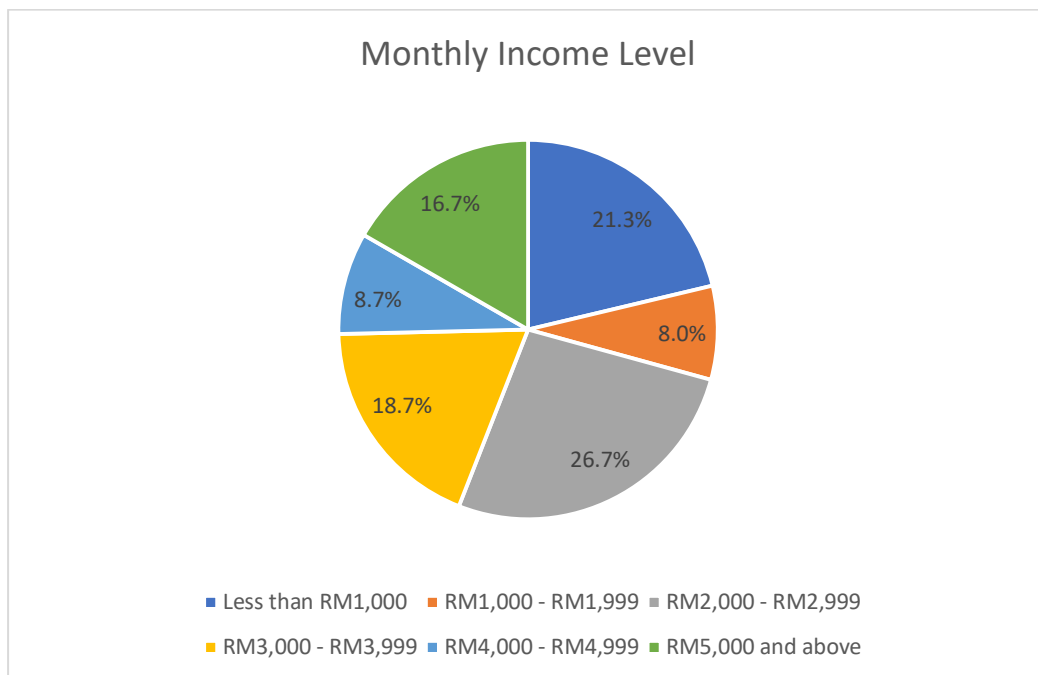
#### 4.1.1.4 Monthly Income Level

Table 4.4: Monthly Income Level

Monthly Income Level	Frequency	Percent (%)	Cumulative Percent (%)
Less than RM1,000	32	21.3	21.3
RM1,000 – RM1,999	12	8.0	29.3
RM2,000 – RM2,999	40	26.7	56.0
RM3,000 – RM3,999	28	18.7	74.7
RM4,000 – RM4,999	13	8.7	83.3
RM5,000 and above	25	16.7	100.0
Total	150	100.0	

Note. Developed for research

Figure 4.4: Monthly Income Level



Note. Developed for research

Table 4.4 and Figure 4.4 exhibit the respondents' monthly income. 40 respondents (26.7%) which is the majority earn between RM2,000 – RM2,999 per month followed by 32 respondents and (21.3%) and 28 respondents (18.7%) earning less than RM1,000 and between RM3,000 – RM3,999 monthly respectively. Furthermore, 25 respondents (16.7%) receive a monthly income of RM5,000 and

above and 13 respondents (8.7%) receive a monthly income of RM4,000 – RM4,999. Only 12 respondents (8.0%) receive a monthly income between RM1,000 – RM1,999.

#### 4.1.2 General Information

The respondents’ general information towards the Chinese brand smartphones which include the choice of Chinese brand smartphone and the accepted price range for Chinese smartphone is shown in this section.

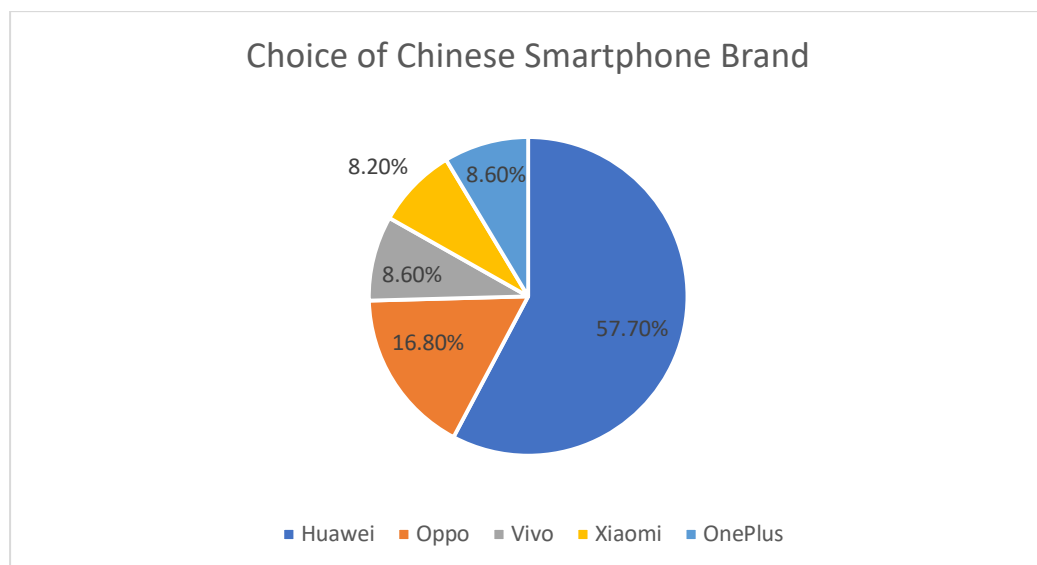
##### 4.1.2.1 Choice of Chinese Smartphone Brand

Table 4.5: Choice of Chinese Smartphone Brand (Respondents may choose more than one option, n=220)

Smartphone Brand	Frequency	Percent (%) (when n=220)	Percent of Cases (%) (when n=150)
Huawei	127	57.7	84.7
Oppo	37	16.8	24.7
Vivo	19	8.6	12.7
Xiaomi	18	8.2	12.0
OnePlus	19	8.6	12.7

Note. Developed for research

Figure 4.5: Choice of Chinese Smartphone Brand



Note. Developed for research

Table 4.5 and Figure 4.5 show the choice of Chinese smartphone brand which the respondents intend to purchase. As the respondents are allowed to pick more than one options, the frequency is n=220. 127 respondents (57.7%) intend to purchase Huawei followed by 37 respondents (16.8%) who intend to purchase Oppo. 19 (8.6%), 18 (8.2%) and 19 (8.6%) respondents intend to purchase Vivo, Xiaomi and OnePlus respectively. It can be seen that most of the respondents favour Huawei than other brands.

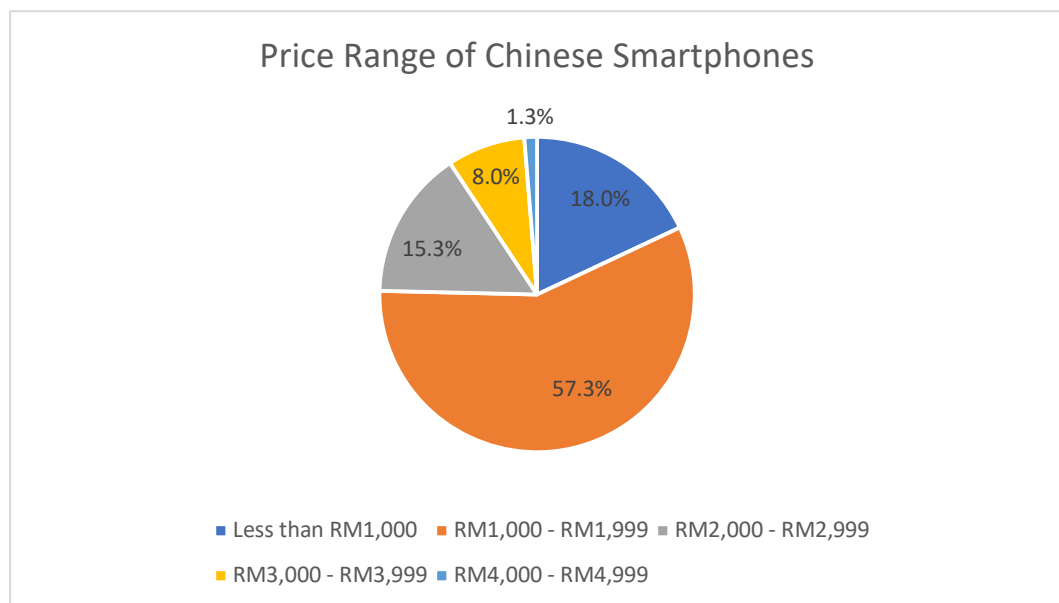
#### 4.1.2.2 Accepted Price Range of Chinese Smartphone

Table 4.6: Accepted Price Range of Chinese Smartphone

Price Range	Frequency	Percent (%)	Cumulative Percent (%)
Below than RM1,000	27	18.0	18.0
RM1,000 – RM1,999	86	57.3	75.3
RM2,000 – RM2,999	23	15.3	90.7
RM3,000 – RM3,999	12	8.0	98.7
RM4,000 and above	2	1.3	100.0
Total	150	100.0	

Note. Developed for research

Figure 4.6: Accepted Price Range of Chinese Smartphone



Note. Developed for research

Table 4.6 and Figure 4.6 show the accepted price range of Chinese smartphone by the respondents. 27 respondents (18.0%) prefer to purchase a Chinese smartphone below than RM1,000 while 86 respondents (57.3%) which is the majority prefer to purchase a Chinese smartphone between the price range of RM1,000 – RM1,999. Furthermore, 23 respondents (15.3%) and 12 respondents (8.0%) intend to a purchase a Chinese smartphone for the price between RM2,000 – RM2,999 and RM3,000 – RM3,999 respectively. Only 2 respondents (1.3%) intend to purchase a Chinese smartphone for the price RM4,000 and above.

#### 4.1.3 Descriptive Statistic Measurement of Constructs

Table 4.7: Descriptive Statistic of Dependent Variable and Independent Variables

	Perceived Usefulness	Perceived Ease of Use	Price	Social Influence	Perceived Quality	Purchase Intention
N Valid	150	150	150	150	150	150
Missing	0	0	0	0	0	0
Mean	3.5317	3.8200	3.8480	3.2333	3.8333	3.6308
Median	3.7500	3.8000	3.8000	3.1667	4.000	3.7500
Standard Deviation	.85447	.50328	.43884	.82150	.71549	.67047
Skewness	-.662	-.027	.531	-.320	-1.680	-1.313
Std. Error of Skewness	.198	.198	.198	.198	.198	.198
Kurtosis	1.203	-.037	.570	-.245	5.070	3.310
Std. Error of Kurtosis	.394	.394	.394	.394	.394	.394
Range	4.00	4.00	2.00	4.00	4.00	4.00
Minimum	1.00	1.00	3.00	1.00	1.00	1.00
Maximum	5.00	5.00	5.00	5.00	5.00	5.00

Note. Developed for research

#### **4.1.3.1 Perceived Usefulness**

According to Table 4.7, the standard deviation of perceived usefulness is 0.854. The mean and median values are 3.532 and 3.750 respectively. Both of the values are near to each other and thus, the data is perceived to be a symmetrical distribution. The skewness and kurtosis values are -0.662 and 1.203 respectively which is in the acceptable range. The data is said to be moderately skewed.

#### **4.1.3.2 Perceived Ease of Use**

According to Table 4.7, the standard deviation of perceived ease of use is 0.503. The mean and median values are 3.820 and 3.800 respectively. Both of the values are near to each other and thus, the data is perceived to be a symmetrical distribution. The skewness and kurtosis values are -0.027 and -0.037 respectively which is in the acceptable range. The data is said to be fairly symmetrical.

#### **4.1.3.3 Price**

Based on Table 4.7, the standard deviation of price is 0.439. The mean and median values are 3.848 and 3.800 respectively. Both of the values are near to each other and thus, the data is said to be a symmetrical distribution. The skewness and kurtosis values are -0.531 and 0.570 respectively which is in the acceptable range. The data is said to be moderately skewed.

#### **4.1.3.4 Social Influence**

Based on Table 4.7, the standard deviation of social influence is 0.822. The mean and median values are 3.233 and 3.167 respectively. Both of the values are near to each other and thus, the data is perceived to be a symmetrical distribution. The skewness and kurtosis values are -0.320 and -0.245 respectively which is in the acceptable range. The data is said to be fairly symmetrical.

#### 4.1.3.5 Perceived Quality

According to Table 4.7, the standard deviation of perceived quality is 0.715. The mean and median values are 3.833 and 4.000 respectively. Both of the values are near to each other and thus, the data is perceived to be a symmetrical distribution. The skewness and kurtosis values are -1.680 and 5.070 respectively which is in the acceptable range. The data is said to be highly skewed.

#### 4.1.3.6 Purchase Intention

According to Table 4.7, the standard deviation of purchasing intention is 0.670. The mean and median values are 3.631 and 3.750 respectively. Both of the values are near to each other and thus, the data is perceived to be a symmetrical distribution. The skewness and kurtosis values are -1.313 and 3.310 respectively which is in the acceptable range. The data is said to be highly skewed.

### 4.2 Reliability Test

The reliability of all the variables in this research is evaluated by using the Cronbach's Alpha test. The results from the reliability test is tabulated in Table 4.8.

Table 4.8: Results of Reliability Test

Variables	Cronbach's Alpha	No. of items
Perceived Usefulness	0.937	4
Perceived Ease of Use	0.626	5
Price	0.608	5
Social Influence	0.858	6
Perceived Quality	0.924	6
Purchase Intention	0.867	8

Note. Developed for research

The reliability test is a measurement indicator for internal consistency while Cronbach's Alpha is a normal approach used to test the items' correlation (Saunders et al., 2009). Sekaran and Bougie (2010) stated that if the Cronbach's Alpha range

is less than 0.60, it falls into the poor level and the range between 0.60 and 0.70 indicates that it is of satisfactory level.

Based on Table 4.8, the Cronbach Alpha's of both the independent and dependent variables are above 0.6 as stated in the rule of thumb about correlation coefficient in Chapter 3 which prove that it is reliable to measure all the item of the variables. The highest score of the reliability test among the variables is 0.937 which is perceived usefulness with four items followed by perceived quality with an alpha coefficient value of 0.924 with six items. As both of the values are in the range of 0.9 or more, it is said that the strength of association is excellent. Moreover, purchase intention with eight items and social influence with six items have an alpha coefficient value of 0.867 and 0.858 respectively. As both of the value falls in the range of 0.8 to <0.9, it is said that the strength of association is very good. Perceived ease of use with five items and price with five items have both the readings 0.626 and 0.608 respectively. As the readings fall in the range of 0.6 to <0.7, it is said that the strength of association is moderate. Lastly, the Cronbach's alpha values for all the variables in this study are all above 0.60 and they indicate that all constructs are reliable.



### 4.3 Inferential Analysis

#### 4.3.1 Pearson Correlation Coefficient

Table 4.9: Pearson Correlation Analysis

		Perceived Usefulness	Perceived Ease of Use	Price	Social Influence	Perceived Quality	Purchasing Intention
Perceived Usefulness	Pearson Correlation	1	.519**	.219**	.473**	.606**	.557**
	Sig. (2-tailed)		.000	.007	.000	.000	.000
	N	150	150	150	150	150	150
Perceived Ease of Use	Pearson Correlation	.519**	1	.275**	.346**	.442**	.440**
	Sig. (2-tailed)	.000		.001	.000	.000	.000
	N	150	150	150	150	150	150
Price	Pearson Correlation	.219**	.275**	1	.150	.258**	.244**
	Sig. (2-tailed)	.007	.001		.066	.001	.003
	N	150	150	150	150	150	150
Social Influence	Pearson Correlation	.473**	.346**	.150	1	.391**	.577**
	Sig. (2-tailed)	.000	.000	.066		.000	.000
	N	150	150	150	150	150	150
Perceived Quality	Pearson Correlation	.606**	.442**	.258**	.391**	1	.697**
	Sig. (2-tailed)	.000	.000	.001	.000		.000
	N	150	150	150	150	150	150
Purchasing Intention	Pearson Correlation	.557**	.440**	.244**	.577**	.697**	1
	Sig. (2-tailed)	.000	.000	.003	.000	.000	
	N	150	150	150	150	150	150

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

Note. Developed for research

The correlation analysis of each variable (perceived usefulness, perceived ease of use, price, social influence and perceived quality, purchasing intention) is significant at the two tailed with 0.01 level. The above results displayed that all correlations between independent variables and dependent variable are positive. From Table 4.9, it indicates that purchasing intention has the strongest positive correlation with perceived quality (value of coefficient, r is 0.697) followed by both perceived usefulness and social influence sharing the same value of coefficient which is 0.577. Perceived ease of use has the value of coefficient of 0.440 and price, which has the weakest significant correlation with purchase intention as compared to other independent variables has a reading of 0.244. All independent variables except for price showed positive and moderate correlations as the value of coefficient is between 0.41 and 0.70. Price has a small but definite correlation as its coefficient value is between the range of 0.21 and 0.40.

### 4.3.2 Multiple Regression Analysis

Table 4.10: Model Summary

R	R Square	Adjusted R Square	Std Error of the Estimate
.778 <sup>a</sup>	.605	.591	.42883

Note. Developed for research

As shown in Table 4.10, the R value is 0.778 which is more than the expected value of 0.7, and this indicates that there is a good level of prediction relationship between the independent and dependent variables. The coefficient of determinant which is the R Square has a reading of 0.605 for the purchasing intention regression of 0.778. Thus, it is said that 60.5% of the variation on Generation Y's purchasing intention was influenced by the five independent variables (perceived usefulness, perceived ease of use, price, social influence and perceived quality). However, the remaining 39.5% was not influenced or is explainable by the independent variables.

Table 4.11: ANOVA

Model		Sum of Square	df	Mean square	F	Sig.
1	Regression	40.498	5	8.100	44.044	.000 <sup>b</sup>
	Residual	26.481	144	.184		
	Total	66.979	149			

a. Dependent Variable: Purchase Intention

b. Predictors: (Constant), Perceived Usefulness, Perceived Ease of Use, Price, Social Influence, Perceived Quality

Note. Developed for research

According to Table 4.11, it shows that results of Analysis of Variance (ANOVA). The F value statistics 44.044 is used to explain the test output significant for all R values. The significant value is used to show the result of the research, to find out if the independent variables have a significant relationship with the dependent variable. Since the F value in this research is 44.044 and the significant value is 0.000 which is less than alpha 0.05 ( $p=0.000 < 0.05$ ), it shows that this model is significant to predict the dependent variable (purchase intention). Thus, it indicates that there is a significant relationship at least between one of the independent variables and dependent variable.

Table 4.12: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.269	0.388		0.693	0.489
Perceived Usefulness	0.048	0.057	0.061	0.841	0.402
Perceived Ease of Use	0.102	0.096	0.068	1.067	0.288
Price	0.069	0.108	0.035	0.635	0.526
Social Influence	0.266	0.049	0.326	5.386	0.000
Perceived Quality	0.462	0.064	0.493	7.240	0.000

a. Dependent Variable: Purchase Intention

Note. Developed for research

Based on Table 4.12, the regression equation explaining the relationship between purchase intention and perceived usefulness, perceived ease of use, price, social influence and perceived quality. The standardized coefficients for perceived usefulness is 0.061, perceived ease of use is 0.068, price is 0.035, social influence is 0.326 and perceived quality is 0.493. Besides, the results also showed that social influence and perceived quality have a significant relationship with purchasing intention as their p value is less than 0.05 ( $p=0.000 < 0.05$ ). However, it is found that perceived usefulness ( $p=0.402$ ), perceived ease of use (0.288) and price (0.526) have no significant relationship with purchasing intention as the p value is more than 0.05.

Purchase intention= (0.269) + 0.048 (Perceived Usefulness) + 0.102 (Perceived Ease of Use) + 0.069 (Price) + 0.266 (Social Influence) + 0.462 (Perceived Quality)

## 4.4 Hypothesis Testing

Table 4.13: Summary for Hypothesis Testing

Hypothesis		Results	
H1	There is a significant positive relationship between perceived usefulness and purchase intention of Chinese smartphones brands.	Beta value = 0.061 p = 0.402	Not supported
H2	There is a significant positive relationship between perceived ease of use and purchase intention of Chinese smartphone brands.	Beta value = 0.068 p = 0.288	Not supported
H3	There is a significant positive relationship between price and purchase intention of Chinese smartphone brands.	Beta value = 0.035 p = 0.526	Not supported
H4	There is a significant positive relationship between social influence and purchase intention of Chinese smartphone brands.	Beta value = 0.326 P = 0.000	Supported
H5	There is a significant positive relationship between perceived quality and purchase intention of Chinese smartphone brands.	Beta value = 0.0493 p = 0.000	Supported

Note. Developed for research

**H1: There is a significant positive relationship between perceived usefulness and purchase intention of Chinese smartphone brands.**

According to the analysis, this hypothesis is not supported due to its p-value, 0.402 which is more than 0.05. Thus, it is said that there is no significant positive relationship between perceived usefulness and purchase intention of Chinese smartphone brands.

**H2: There is a significant positive relationship between perceived ease of use and purchase intention of Chinese smartphone brands.**

According to the analysis, this hypothesis is not supported due to its p-value, 0.288 which is more than 0.05. Thus, it is said that there is no significant positive relationship between perceived ease of use and purchase intention of Chinese smartphone brands.

**H3: There is a significant positive relationship between price and purchase intention of Chinese smartphone brands.**

According to the analysis, this hypothesis is not supported due to its p-value, 0.526 which is more than 0.05. Thus, it is said that there is no significant positive relationship between price and purchase intention of Chinese smartphone brands.

**H4: There is a significant positive relationship between social influence and purchase intention of Chinese smartphones brands.**

According to the analysis, this hypothesis is supported due to its p-value, 0.000 which is less than 0.05. Thus, it is said that there is a significant positive relationship between social influence and purchase intention of Chinese smartphone brands.

**H5: There is a significant positive relationship between perceived quality and purchase intention of Chinese smartphones brands.**

According to the analysis, this hypothesis is supported due to its p-value, 0.000 which is less than 0.05. Thus, it is said that there is a significant positive relationship between perceived quality and purchase intention of Chinese smartphone brands.

#### **4.4 Conclusion**

The chapter showed the data obtained from the questionnaires. The summary of the respondents' demographic profile is done by using descriptive analysis. Moreover, the Cronbach's Alpha reliability test followed by Pearson Correlation and multiple regression are used to find out the reliability and relationship between independent and dependent variables. Based on the analysis, a discussion will be shown in chapter five.

## **CHAPTER 5**

### **DISCUSSION AND CONCLUSION**

#### **5.0 Introduction**

The summary of the statistical analysis, findings and hypotheses testing outcome discussed in chapter four will be discussed in this chapter. Besides, the study's limitation will be identified and explored. The recommendations for further studies will also be suggested followed by a conclusion of this research.

#### **5.1 Summary of Statistical Analysis**

##### **5.1.1 Descriptive Analysis**

The targeted respondents' demographic information was grouped according to their gender, age range, education level and monthly income. Majority of the respondents in this research study were female which consists of 65.3% or 98 out of 150 respondents. Besides, majority of the respondents are between the age 23 and 26 years old or born in between 1996 and 1996 which consist of 71.3% or 107 out of 150 respondents. This age range of respondents are either still pursuing their Bachelor's or Master's degree or already in the working world. Moreover, 107 out of 150 respondents or 71.3% have at least a Bachelor's degree. This results supports the study by Malaysian Communications and Multimedia Commission (2017) that the highest adoption group of smartphone are the people who have tertiary education. According to this study's findings, majority of the respondents or 26.7%



received a monthly income of RM2,000 – RM2,999. This is supported by Malaysian Communications and Multimedia Commission (2017) claiming that the people who have an income of RM1,000 – RM3,000 are the highest owners of smartphone in Malaysia.

Furthermore, for the respondents' general information, 57.7% or majority of the respondents chose Huawei as their brand of choice if they were to purchase a Chinese brand smartphone. It was also found that 57.3% of the respondents chose to purchase a Chinese brand smartphone which has a price range between RM1,000 – RM1,999.

### **5.1.2 Scale Measurement**

The reliability test which is Cronbach's Alpha were used for the scale measurement in this research to measure the reliability and correlations among the 34 items of this research. Besides, in this research, based on Table 4.8, all the items were more than 0.6 which is at the acceptable level. Perceived usefulness acquired the highest score of Cronbach's Alpha which is 0.937, perceived quality, 0.924 and purchasing intention, 0.867. Social influence, perceived ease of use and price have a Cronbach's Alpha reading of 0.858, 0.626 and 0.608 respectively. All variables are proven to be dependable through the Cronbach's Alpha reliability test as all the readings are above 0.6.

### **5.1.3 Inferential Analysis**

#### **5.1.3.1 Pearson Correlation Analysis**

The relationship of each variable (perceived usefulness, perceived ease of use, price, social influence, perceived quality and purchasing intention) was measured using the Pearson Correlation analysis. Among the independent variable, perceived quality has the strongest positive relationship with purchasing intention followed where  $r = 0.697$  followed by both perceived usefulness and social influence sharing the same value of coefficient which is  $r = 0.577$ . Perceived ease of use has the coefficient value of 0.440 and price,  $r = 0.244$  which show the weakest significant relationship with purchase intention as compared to other independent variables.

All independent variables except for price showed positive and moderate correlations as the value of coefficient is between 0.41 and 0.70. Price has a small but definite correlation as its coefficient value is between the range of 0.21 and 0.40. Overall, the results show that all the independent and dependent variables show that there are significant positive relationships.

### **5.1.3.2 Multiple Regression Analysis**

The association among the independent variables (perceived usefulness, perceived ease of use, price, social influence and perceived quality) towards the purchase intention of Chinese brand smartphone is studied by using the multiple regression analysis. According to Table 4.9, it shows that the R square /  $R^2$  is 0.605 which means 60.5% variance of purchasing intention is explained by the independent variables (perceived usefulness, perceived ease of use, price, social influence and perceived quality). According to the table of coefficients, Table 4.11, a linear equation was formed as shown below.

$$\text{Purchase intention} = (0.269) + 0.048 (\text{Perceived Usefulness}) + 0.102 (\text{Perceived Ease of Use}) + 0.069 (\text{Price}) + 0.266 (\text{Social Influence}) + 0.462 (\text{Perceived Quality})$$

Perceived quality obtained the highest beta value of 0.462 which shows that it is the strongest independent variable that has an impact on purchasing intention and social influence with a beta value of 0.266. The p-value for both social influence and perceived quality is  $p = 0.000$ , which is less than 0.05 ( $p < 0.05$ ). Thus, it is said that H4 and H5 are supported.

Moreover, based on the results, it is found that perceived usefulness, perceived ease of use and price with p-values of 0.402, 0.288 and 0.526 show that they do not have a significant impact on purchasing intention as the p-value is greater than 0.05 ( $p > 0.05$ ). Thus, it is said that H1, H2, and H3 are not supported.

## 5.2 Discussion of Major Findings

Table 5.1: Summary of Research Objective, Hypotheses and Results

Research Objectives	Hypothesis	Sig p	Results
To examine the influence of perceived usefulness on the purchase intention of Chinese smartphone brands.	H1: There is a significant positive relationship between perceived usefulness and purchase intention of Chinese smartphone brands.	p = 0.402	Not supported
To examine the influence of perceived ease of use on the purchase intention of Chinese smartphone brands.	H2: There is a significant positive relationship between perceived ease of use and purchase intention of Chinese smartphone brands.	p = 0.288	Not supported
To examine the influence of price on the purchase intention of Chinese smartphone brands.	H3: There is a significant positive relationship between price and purchase intention of Chinese smartphone brands.	p = 0.526	Not supported
To examine the influence of social influence on the purchase intention of Chinese smartphone brands.	H4: There is a significant positive relationship between social influence and purchase intention of Chinese smartphone brands.	p = 0.000	Supported

To examine the influence of perceived quality on the purchase intention of Chinese smartphone brands.	H5: There is a significant positive relationship between perceived quality and purchase intention of Chinese smartphone brands.	p = 0.000	Supported
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Note. Developed for research

### 5.2.1 Perceived Usefulness

Research Objective: To examine the influence of perceived usefulness on the purchase intention of Chinese smartphone brands.

Research Question: Is there any significant positive relationship between perceived usefulness and the purchasing intention of Chinese smartphone brands?

H1: There is a significant positive relationship between perceived usefulness and purchase intention of Chinese smartphone brands.

The findings from the multiple regression analysis showed that the p-value for perceived usefulness towards purchasing intention was more than 0.05 (p=0.402). Thus, the first hypothesis, H1 is not accepted as there is no significant positive relationship between perceived usefulness and purchasing intention of Chinese smartphone brands.

The findings of this study showed that perceived usefulness might not be the main factor which affect the purchasing intention of Chinese smartphone brands. This finding is supported by Ismail (2016) who stated that the users prefer to own a phone as a symbol of being prestigious rather than finding how useful the smartphone is or how the features of the smartphone can contribute benefits to their life. Besides, this research's finding is supported by Martawilaga and Purwanegara's (2016) who said that although the consumers found out that a particular product is useful to them but the usefulness is not their main concern when purchasing. Thus, it can be

said that although Chinese brand smartphones are useful, the potential customers are not concern with their usefulness as they prioritize other factors such as the quality of the smartphones.

As a conclusion, the relationship between perceived usefulness and purchasing intention of Chinese smartphone brands cannot be proven by the findings of this research and thus, the H1 is not accepted.

### **5.2.2 Perceived Ease of Use**

Research Objective: To examine the influence of perceived ease of use on the purchase intention of Chinese smartphone brands.

Research Question: Is there any significant positive relationship between perceived ease of use and the purchasing intention of Chinese smartphone brands?

H2: There is a significant positive relationship between perceived ease of use and purchase intention of Chinese smartphone brands.

According to the results obtained from the multiple regression analysis, the p-value for perceived ease of use towards purchasing intention was more than 0.05 ( $p=0.288$ ). Thus, the second hypothesis, H2 is not supported as there is no significant positive relationship between perceived ease of use and purchasing intention of Chinese smartphone brands.

This findings showed that perceived ease of use does not directly affect the purchasing intention of Chinese brand smartphone which is supported by Habu and others' (2017) findings as users nowadays do not value the functions' usability. They do not care whether the smartphone is easy to use or not. However, the findings contradicted with Thokchom's (2012) saying that perceived usefulness has an effect on consumer's purchase intention to purchase a smartphone as the smartphone can improves the consumers' performance and made their life easier.

According to Ismail (2016), people nowadays own a phone to show their reputation rather than understanding how to maximize the usage of a smartphone's features.

This might explain why the respondents in this finding perceived usefulness as a less important factor which affect their purchasing intention. The potential consumers might purchase a Chinese smartphone due to the social influence they received as Chinese brand smartphones are getting more popular nowadays. This study's finding is also supported by Mohammed (2018) who says that the TAM perceived usefulness might not be relevant anymore in today's world as the benefits of using the technology is widely recognized and acknowledged.

Thus, the results acquired from the findings are not able to answer the research question and achieve the research objective. It is said that H2 is not being accepted.

### **5.2.3 Price**

Research Objective: To examine the influence of perceived price on the purchase intention of Chinese smartphone brands.

Research Question: Is there any significant positive relationship between price and the purchasing intention of Chinese smartphone brands?

H3: There is a significant positive relationship between price and purchase intention of Chinese smartphone brands.

The results acquired from the multiple regression analysis shows the p-value for price towards purchasing intention was more than 0.05 ( $p=0.526$ ). Thus, the third hypothesis, H3 is not supported as there is no significant relationship between price and purchasing intention of Chinese smartphone brands. The findings contradict with Karjaluoto and others' (2005) finding which stated that price is an important element that affects the purchasing intention. This is because price is used as an indicator to determine a brand's quality.

According to Malviya and other's (2013), customers does not emphasize on the price and they are ready to purchase one regardless of the price. Besides, it is said that when the customers are unsure about a product's quality, they will not purchase regardless the range of price it ranges. This explains this research's finding as Chinese brand smartphones are still considered on their way to dominate the world

and people are still unaware of their quality due to lack of awareness or exposure to Chinese brand smartphones. It might also be due to the idea where China is famous for producing low quality items. Thus, potential customers are still afraid of purchasing a Chinese-made product despite the price. Besides, this is supported by Urbany and friends' finding (1997) where the price will only influence the purchasing intention only if the potential customers are certain about a product's quality.

Thus, it is said that H3 is not being accepted as it cannot answer the research question or achieved the research objective.

#### **5.2.4 Social Influence**

Research Objective: To examine the influence of social influence on the purchase intention of Chinese smartphone brands.

Research Question: Is there any relationship between social influence and the purchasing intention of Chinese smartphone brands?

H4: There is a significant positive relationship between social influence and purchase intention of Chinese smartphone brands.

The results acquired from the multiple regression analysis showed that the p-value for social influence towards purchasing intention was less than 0.05 ( $p=0.000$ ). Thus, the forth hypothesis, H4 is accepted as there is a significant positive relationship between social influence and purchasing intention of Chinese smartphone brands. This finding is supported by Khan and Rohi (2013) who stated that people tend to be influenced by family and friends' recommendations. This is because family and friends are the people whom an individual can trust where they take their suggestion and words seriously. Rahim and others (2015) also mentioned that with the existing social medias, it is easy for people to find information regarding to a product which includes review of others users and also their comments.

Thus, it is said that H4 where social influence has a significant impact on purchase intention of Chinese smartphone brands is being accepted as it gets to answer the research question and achieve the research objective.

### **5.2.5 Perceived Quality**

Research Objective: To examine the influence of perceived quality on the purchase intention of Chinese smartphone brands.

Research Question: Is there any relationship between perceived quality and the purchasing intention of Chinese smartphone brands?

H5: There is a significant positive relationship between perceived quality and purchase intention of Chinese smartphone brands.

The results from the multiple regression analysis shows the p-value for perceived quality towards purchasing intention was less than 0.05 ( $p=0.000$ ). Thus, the fifth hypothesis, H5 is accepted as there is a significant positive relationship between perceived quality and purchasing intention of Chinese smartphone brands. This result is supported by Mirabi and friends' (2015) finding which deduced that quality is a main element which affect purchasing intention as when there is a constant process of improvement, it will increase a product's performance.

Besides, the findings is supported by Yunus and Rashid (2016) where the relationship between perceived quality and purchase intention of mobile phones brands from China is significant. Perceived quality is a crucial aspect when considering to purchase a product which is made in China as the consumers are concern about the quality as China if often related to making low quality products. Pongrujaporn and Kapasuwan (2015) also mentioned that after using a purchased product, the purchasing intention might increase or decrease which will determine whether they will be a repurchasing in the future. In addition, Sasitharan (2015) also claimed that Malaysia's consumers are most probably to be influenced by the quality of a smartphone when purchasing one.



Thus, it is said that the relationship between perceived quality and purchasing intention of Chinese smartphone brands is significant. The research objective is fulfilled and the research question is answered. Therefore, H5 is accepted.

## **5.3 Implications of the Study**

### **5.3.1 Managerial Implications**

The findings of this study showed that only two independent variables have a significant relationship with purchase intention towards Chinese smartphones brands which are social influence and perceived quality. The other three independent variables, perceived ease of use, perceived usefulness and price are found to have insignificant relationships with purchasing intention towards Chinese brand smartphones. The perceived usefulness and perceived ease of use will be discussed in the later section of theory implication.

Firstly, price is found not to affect the purchasing intention compared to other variables. This might be due to the respondents who are Generation Y, having the age ranging from 23-38. Even though Generation Y has high expectation in competitive pricing, they are most probably to purchase prestige products as they involve in a high level of shopping enjoyment more than other generations (Williams & Page, 2011). Thus, the Chinese smartphone brands need to constantly introduce new products which is an effective marketing strategy to the Generation Y consumers as they get bored easily with the old smartphone models.

Moreover, this study demonstrated the crucial role of social influence which affect the purchasing intention. This is because the respondents are constantly being exposed to peer influence and they are more likely to believe their words, be it their family or friends. Celebrities endorsement will also influence the consumers to purchase a product as they perceived that the celebrities they adore will promote a good quality or useful product to their fans. This also helps the marketers where they can find more celebrity ambassadors to endorse their products, tap into social media marketing and encourage positive spreading of words among family and friends to persuade more people in using Chinese brand smartphones.

Besides, this study also showed the crucial role of perceived quality that directly impacts the purchase intention. Thus, it is clear that the quality must be continuously improved to satisfy consumers and to compete with other leading brands. The retailers should be stern when managing the operation process and guarantee the quality standards (Vo & Nguyen, 2015). This is to encourage receiving high perception of quality from the customers. As this research studies on the purchasing intention of Chinese smartphone brands, the potential customers are seemed to be have more concern on the quality of the smartphones. This might be caused by the country or origin of the smartphone which is China which is often related to producing low quality products and the potential customers might not be familiar with the brands from China. Thus, phone manufacturers have to maintain their smartphones' quality on par with other big brands such as Apple and Samsung.

### **5.3.2 Theory Implication**

The Technology Acceptance Model (TAM) is utilized to form a foundation for this research to examine the acceptance of system of potential users. However, both variables from the TAM, perceived usefulness and perceived ease of use are found to not have a significant relationship with the purchasing intention. Based on the literature review made, older journals are more likely to find those two variables to have a significant relationship be it with purchasing intention, purchasing behaviour or other dependent variables. However, recent years journals which study the TAM model are likely to find that both variables do not have a significant relationship with purchasing intention. This might be due to tech-savvy Generation Y where they do not emphasize on the usefulness or how easy to use a smartphone anymore compared to other factors when purchasing a smartphone. Besides, the two factors mentioned might not be relevant anymore as the benefits of using a technology or system is now widely recognized.

### **5.4 Limitation of Study**

In order to have more improvement in future researches, this study's limitations have been discovered and identified. First of all, the sample size obtained from the respondents might be unable to represent the general population as the data

collection is carried out in Klang Valley. The small sample size, n=150 does not consider as a large sampling size. Thus, having a larger sampling size will increase the precision of data analysing. Moreover, there were limited access to journals related to specifically factors affecting the purchasing intention towards China-made products as brand of origin might affect an individual towards his or her purchasing intention. The lack of prior research studies on this area prevents from laying a strong foundation on this research. Besides, as the questionnaire distributed is only written in English, language might be a problem to some respondents where they cannot fully understand the questions asked. Thus, this might contribute to receiving less reliable data. Moreover, due to this research is carried in a short time of period, only a little time is available to investigate the research problems and collecting the data.

## **5.5 Suggestions for Future Research**

Several recommendations are made for future studies.. Firstly, to obtain a more precise result and the overall picture of purchasing intention towards Chinese brand smartphones, the sample size needs to be larger. Secondly, the research suggested that the study should include all the ethnicities so that their perception towards China smartphone brands which affect the purchasing intention could be obtained. As the smartphones are made in China and more often endorsed by Chinese celebrities, Chinese tend to be more familiar with the products compared to other ethnicities.

Besides, as the sample of this research is Generation Y, their perceptions and behaviour might be different from other generations such as Baby Boomers, Generation X and Generation Z. Thus, it is hope that future research can have various sample populations which might resulting in different results in the factors affecting the purchase intention towards Chinese smartphones brands. Lastly, it is hard to identify the in-depth reasons on why some factors are not the respondents' main concern towards purchasing intention of Chinese smartphone brands in a brief term. Therefore, future research could use the longitudinal data analysis which is a qualitative research to track the reasons behind it.

## **5.6 Conclusion**

This research aimed to provide an in-depth study on the aspects that impact the Chinese smartphone brands purchasing intention. This research has successfully achieved the objective to identify all the variables of Chinese smartphone brands purchase intention. After the analysis of data, it is found that only social influence and perceived quality have a significant impact on purchasing intention. Although other factors namely perceived usefulness, perceived ease of use and price do not show a significant impact towards the purchasing intention towards Chinese brand smartphones, they should not be underestimated.

Lastly, the implications, limitations and recommendations for future research are shown in this study as a suggestion for the marketers and researchers to enhance the products to attract more users and for future research purpose respectively. It is hoped that this research enables to give a clear idea of the aspects that impact the Chinese smartphone brands purchasing intention.

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## Appendix A



### UNIVERSITI TUNKU ABDUL RAHMAN FACULTY OF ACCOUNTANCY AND MANAGEMENT

#### A Study on Generation Y's Perception Towards Chinese Smartphone Brands

Dear respondents,

I am a student from Universiti Tunku Abdul Rahman (UTAR), currently pursuing the degree in Master of Business Administration (MBA), Faculty of Accountancy and Management. I am conducting a project as a part of the requirement to complete my master program. The aim of this research is to examine the aspects which affect Generation Y consumers purchase intention towards Chinese smartphone. Your participation in this study is a voluntary basis.

This research is conducted mainly for educational purposes only. All your responses will remain **ANONYMOUS** and all data will be **KEPT PRIVATE AND CONFIDENTIAL**. This questionnaire will take approximately 5 minutes to complete.

Thank you for your cooperation and participation in this study.

Name	Student ID
Goh Li Jie	18UKM07279

- I hereby confirmed that the interviewer has explained the study to me and answered all my questions. I have been told the risk and/or discomforts as well as the possible benefits of the study. I understand what the study is about, how the study is conducted and why it is being performed.
- I agreed to take part in the research project. I understand my rights as a research subject and I **voluntarily** consent to participate in this study. I am free to withdraw at any time without giving any reason and without there being negative consequences. Besides, should I not wish to answer any particular question or questions, I am free to decline.
- I agree for the data collected from me to be used in future research.

Subject signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Section A: General Information

1. Do you prefer to purchase a Chinese smartphone?

Yes

No

2. Which Chinese smartphone brand do you intend to purchase? (You may choose more than one option)

<input type="checkbox"/>	Huawei
<input type="checkbox"/>	Oppo
<input type="checkbox"/>	Vivo
<input type="checkbox"/>	Xiaomi
<input type="checkbox"/>	OnePlus
<input type="checkbox"/>	Others, please specify:

3. What is your considered price range when purchasing a Chinese smartphone?

Below RM 1,000

RM 1,000 – RM 1,999

RM 2,000 – RM 2,999

RM 3,000 – RM 3,999

RM 4,000 and above

## Section B: Factors affecting Chinese smartphone brands purchase intention

Please indicate the degree of agreement with the following statements.

Assessment Scale: SD = Strongly disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree (Please tick “V” on the most appropriate box)

Categories	SD	D	N	A	SA
<b><i>Perceived Usefulness</i></b>					
1. Chinese smartphones help in improving my learning and work.					
2. Chinese smartphones help in strengthening the link between people (to communicate).					
3. Chinese smartphones helps in effective time management.					
4. Chinese smartphones features enable me to accomplish tasks more quickly.					

Categories	SD	D	N	A	SA
<b><i>Perceived Ease of Use</i></b>					
1. Chinese smartphones have a user-friendly interface.					
2. I find it easy to get the Chinese smartphone to do what I want to do.					
3. Interacting with a Chinese smartphone requires a lot of mental effort.					
4. I need to consult the user manual often when using a Chinese smartphone.					
5. Overall, I find Chinese smartphones are easy to use.					

<b>Categories</b>	SD	D	N	A	SA
<b>Price</b>					
1. I prefer purchasing a Chinese smartphone for a high price.					
2. I prefer purchasing a Chinese smartphone for a reduced price.					
3. I think Chinese smartphones are expensive.					
4. I think the price is an important factor in judging the quality of a Chinese smartphone.					
5. I consider the price mainly when I decide to buy a Chinese smartphone.					

<b>Categories</b>	SD	D	N	A	SA
<b>Social Influence</b>					
1. I feel like buying a new Chinese smartphone when my family and friends show their new Chinese smartphones to me.					
2. I usually consult my family or friends before buying a new Chinese smartphone.					
3. I want to have a high specification Chinese smartphone as my family/friend does.					
4. My family/friend always persuades me to buy the same Chinese smartphone/brand as theirs.					
5. I love to have the same Chinese smartphones as my family member/friend.					
6. I usually look for information about Chinese smartphones on the Internet.					

Categories	1	2	3	4	5
<b>Perceived Quality</b>					
1. I think quality is the prior criteria which I consider when purchasing a Chinese smartphone.					
2. Chinese smartphone brands are reliable brands.					
3. Chinese smartphones have excellent features.					
4. Chinese smartphone brands have good quality.					
5. Chinese smartphones are safe to use.					
6. Chinese smartphone brands are trustworthy.					

Categories	SD	D	N	A	SA
<b>Purchase Intention</b>					
1. I have a plan to purchase a Chinese smartphone in the near future.					
2. I search for information about Chinese smartphones on a regular basis.					
3. I always discuss about Chinese smartphones with my friends and family.					
4. Buying a Chinese smartphone is beneficial for daily life.					
5. I will consider the brand of the Chinese smartphone before I purchase it.					
6. I will consider the price of the Chinese smartphone before I purchase it.					
7. I will consider the product feature of the Chinese smartphone before I purchase it.					
8. I will suggest my friends/family to purchase a Chinese smartphone.					

### Section C: Demographic Information

1. Please specify your gender. Please tick “√” on the most appropriate box.

Male

Female

2. Please specify your age. Please tick “√” on the most appropriate box.

23-26 years old

27-30 years old

31-34 years old

35-38 years old

3. Please specify your education level. Please tick “√” on the most appropriate box.

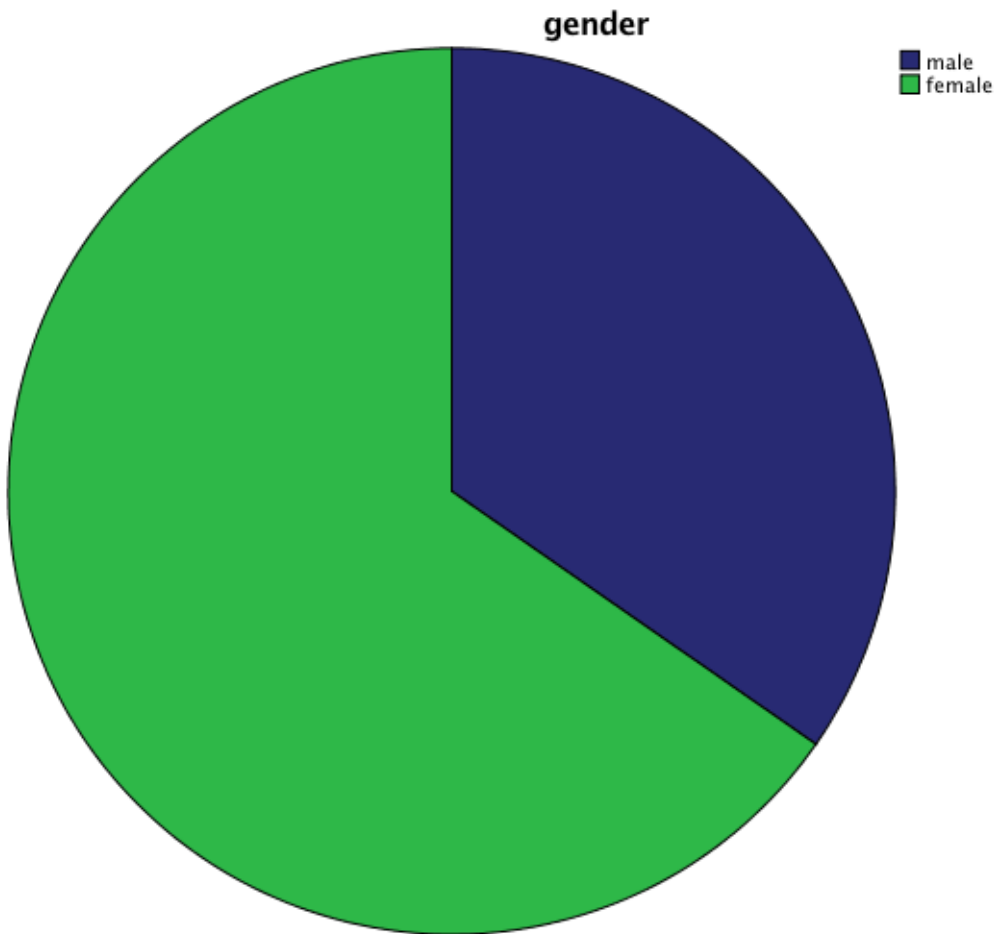
<input type="checkbox"/>	Primary School
<input type="checkbox"/>	High School
<input type="checkbox"/>	Diploma Level
<input type="checkbox"/>	Bachelor’s Degree
<input type="checkbox"/>	Master’s Degree
<input type="checkbox"/>	Doctoral Degree
<input type="checkbox"/>	Others, please specify: _____

4. Please specify your income level. Please tick “√” on the most appropriate box.

<input type="checkbox"/>	Less than RM 1,000
<input type="checkbox"/>	RM 1,000 – RM 1,999
<input type="checkbox"/>	RM 2,000 – RM 2,999
<input type="checkbox"/>	RM 3,000 – RM 3,999
<input type="checkbox"/>	RM 4,000 – RM 4,999
<input type="checkbox"/>	RM 5,000 and above

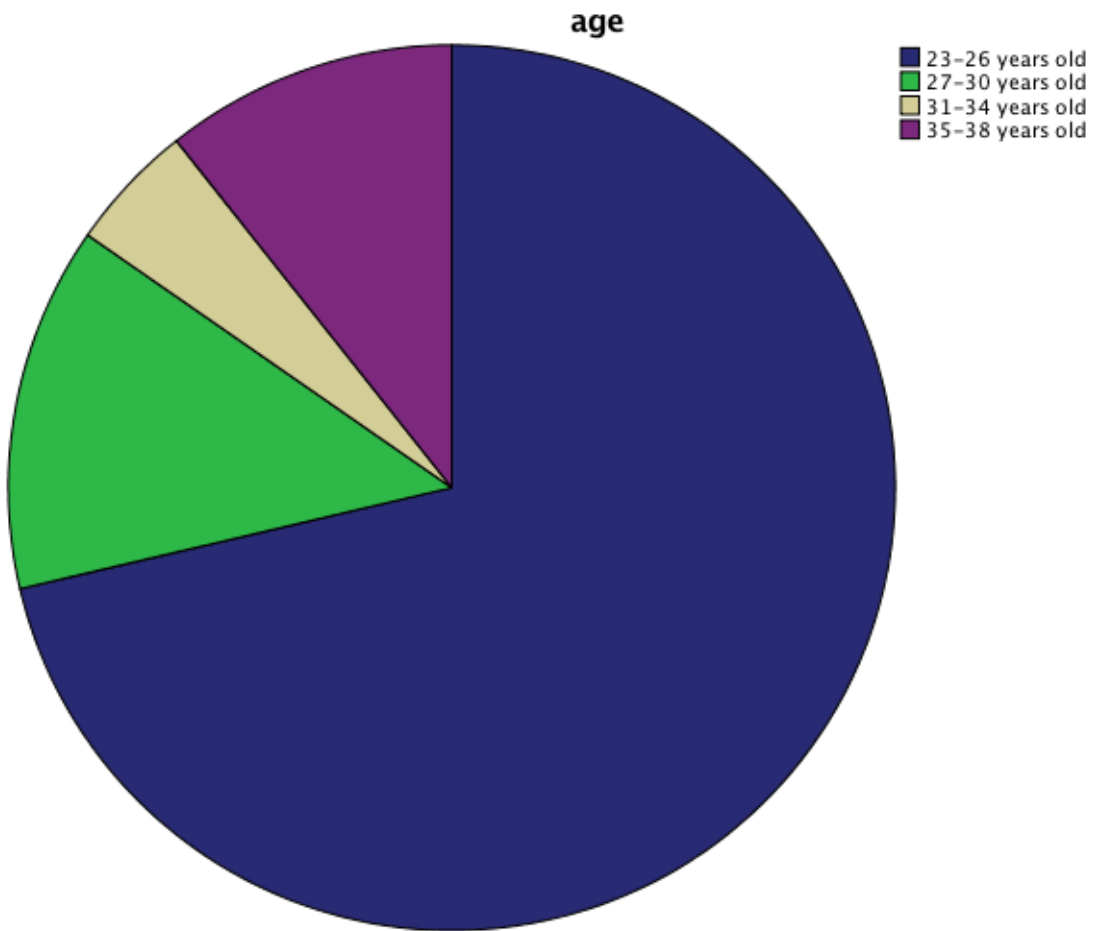
Appendix B

		<b>gender</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	52	34.7	34.7	34.7
	female	98	65.3	65.3	100.0
	Total	150	100.0	100.0	



**age**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 23-26 years old	107	71.3	71.3	71.3
27-30 years old	20	13.3	13.3	84.7
31-34 years old	7	4.7	4.7	89.3
35-38 years old	16	10.7	10.7	100.0
Total	150	100.0	100.0	

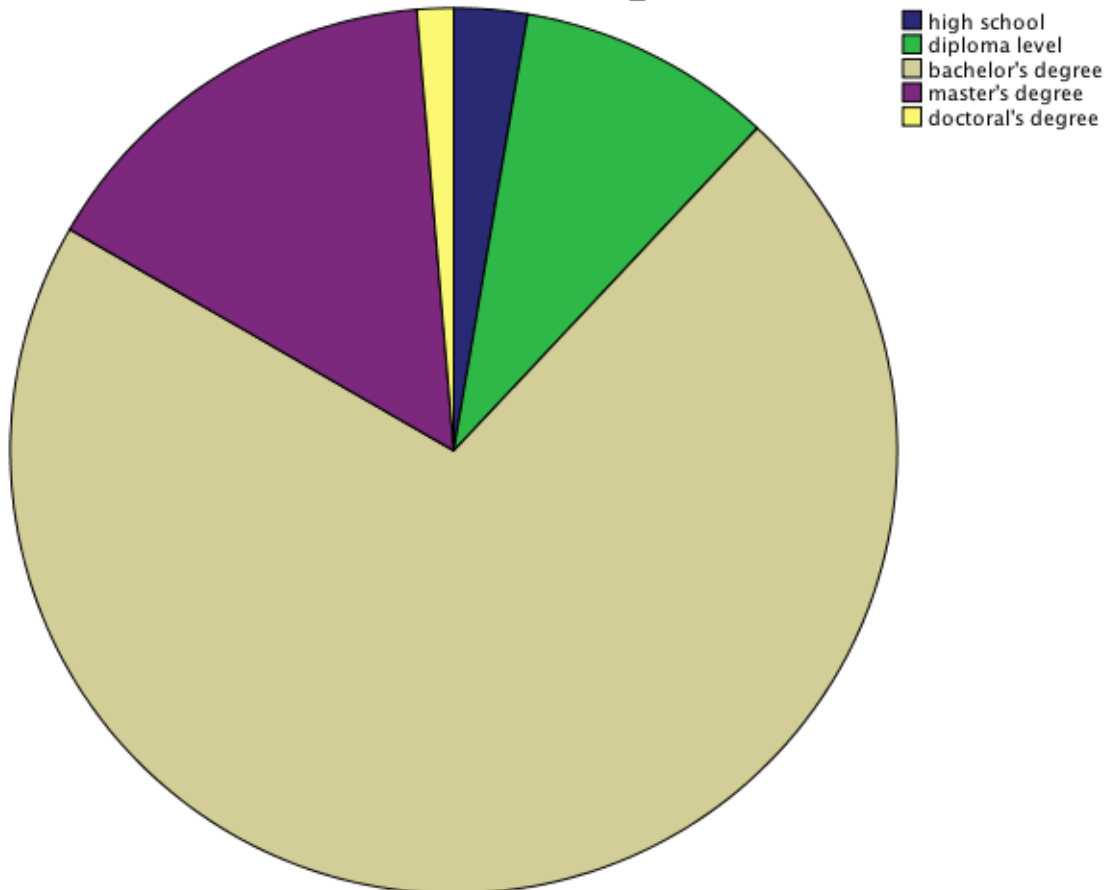




**education\_level**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid high school	4	2.7	2.7	2.7
diploma level	14	9.3	9.3	12.0
bachelor's degree	107	71.3	71.3	83.3
master's degree	23	15.3	15.3	98.7
doctoral's degree	2	1.3	1.3	100.0
Total	150	100.0	100.0	

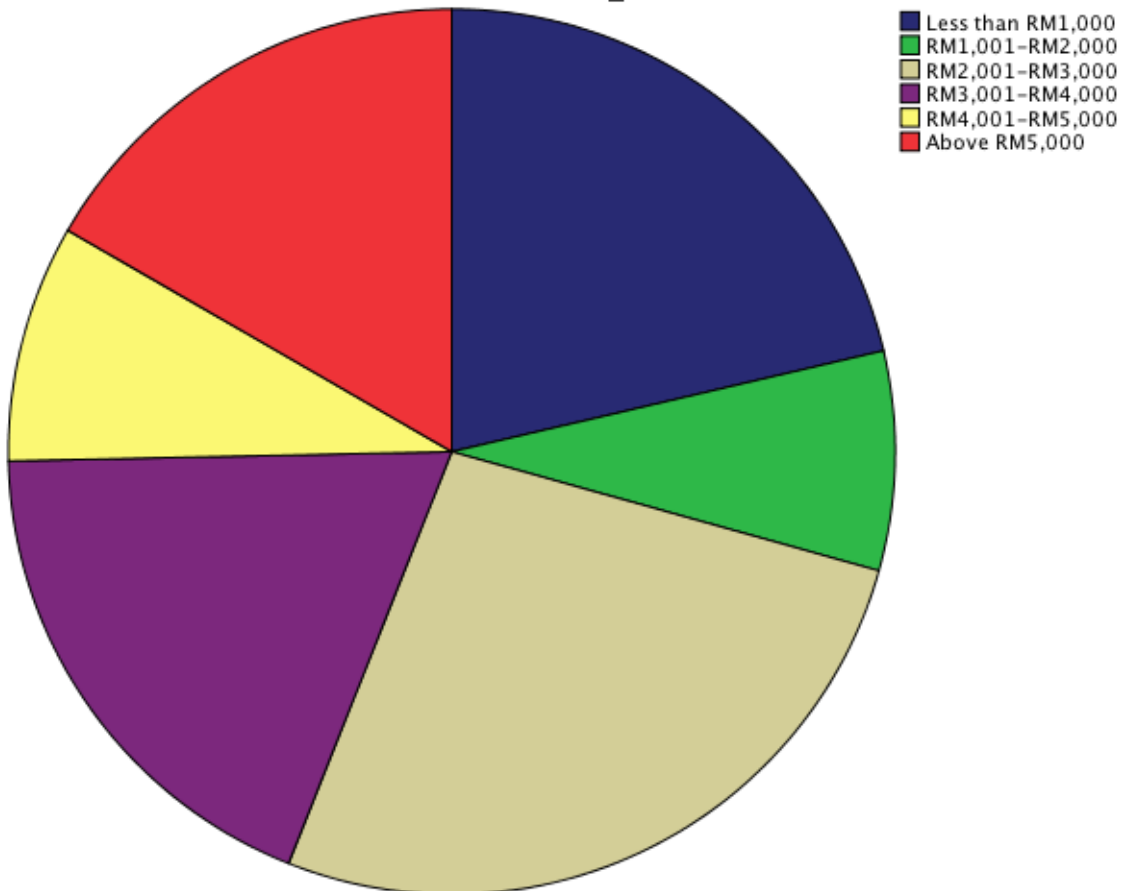
**education\_level**



**income\_level**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than RM1,000	32	21.3	21.3	21.3
RM1,001-RM2,000	12	8.0	8.0	29.3
RM2,001-RM3,000	40	26.7	26.7	56.0
RM3,001-RM4,000	28	18.7	18.7	74.7
RM4,001-RM5,000	13	8.7	8.7	83.3
Above RM5,000	25	16.7	16.7	100.0
Total	150	100.0	100.0	

**income\_level**



### Huawei

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Selected	127	84.7	84.7	84.7
Not selected	23	15.3	15.3	100.0
Total	150	100.0	100.0	

### Oppo

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Selected	37	24.7	24.7	24.7
Not selected	113	75.3	75.3	100.0
Total	150	100.0	100.0	

### Vivo

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Selected	19	12.7	12.7	12.7
Not selected	131	87.3	87.3	100.0
Total	150	100.0	100.0	

### Xiaomi

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Selected	18	12.0	12.0	12.0
Not selected	132	88.0	88.0	100.0
Total	150	100.0	100.0	

### OnePlus

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Selected	19	12.7	12.7	12.7
Not selected	131	87.3	87.3	100.0
Total	150	100.0	100.0	

**smartphone\_price**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Below RM1,000	27	18.0	18.0	18.0
RM1,000 - RM1,999	86	57.3	57.3	75.3
RM2,000- RM2,999	23	15.3	15.3	90.7
RM3,000- RM3,999	12	8.0	8.0	98.7
RM4,000 and above	2	1.3	1.3	100.0
Total	150	100.0	100.0	

**Statistics**

	PU	PEOU	P	SI	PQ	PI
N Valid	150	150	150	150	150	150
Missing	0	0	0	0	0	0
Mean	3.5317	3.8200	3.8480	3.2333	3.8333	3.6308
Median	3.7500	3.8000	3.8000	3.1667	4.0000	3.7500
Std. Deviation	.85447	.50328	.43884	.82150	.71549	.67047
Skewness	-.662	-.027	.531	-.320	-1.680	-1.313
Std. Error of Skewness	.198	.198	.198	.198	.198	.198
Kurtosis	1.203	-.037	.570	-.245	5.070	3.310
Std. Error of Kurtosis	.394	.394	.394	.394	.394	.394
Range	4.00	4.00	2.00	4.00	4.00	4.00
Minimum	1.00	1.00	3.00	1.00	1.00	1.00
Maximum	5.00	5.00	5.00	5.00	5.00	5.00

## Reliability Statistics

Perceived Usefulness

### Reliability Statistics

Cronbach's Alpha	N of Items
.937	4

Perceived Ease of Use

### Reliability Statistics

Cronbach's Alpha	N of Items
.626	5

Price

### Reliability Statistics

Cronbach's Alpha	N of Items
.608	5

Social Influence

### Reliability Statistics

Cronbach's Alpha	N of Items
.858	6

Perceived Quality

### Reliability Statistics

Cronbach's Alpha	N of Items
.924	6

Purchasing Intention

**Reliability Statistics**

Cronbach's Alpha	N of Items
.867	8

**Correlations**

		PU_total	PEOU_total	P_total	SI_total	PQ_total	PI_total
PU_total	Pearson Correlation	1	.519**	.219**	.473**	.606**	.557**
	Sig. (2-tailed)		.000	.007	.000	.000	.000
	N	150	150	150	150	150	150
PEOU_total	Pearson Correlation	.519**	1	.275**	.346**	.442**	.440**
	Sig. (2-tailed)	.000		.001	.000	.000	.000
	N	150	150	150	150	150	150
P_total	Pearson Correlation	.219**	.275**	1	.150	.258**	.244**
	Sig. (2-tailed)	.007	.001		.066	.001	.003
	N	150	150	150	150	150	150
SI_total	Pearson Correlation	.473**	.346**	.150	1	.391**	.577**
	Sig. (2-tailed)	.000	.000	.066		.000	.000
	N	150	150	150	150	150	150
PQ_total	Pearson Correlation	.606**	.442**	.258**	.391**	1	.697**
	Sig. (2-tailed)	.000	.000	.001	.000		.000
	N	150	150	150	150	150	150
PI_total	Pearson Correlation	.557**	.440**	.244**	.577**	.697**	1
	Sig. (2-tailed)	.000	.000	.003	.000	.000	
	N	150	150	150	150	150	150

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

## Multiple Regression

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778 <sup>a</sup>	.605	.591	.42883

a. Predictors: (Constant), PQ\_total, P\_total, SI\_total, PEOU\_total, PU\_total

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.498	5	8.100	44.044	.000 <sup>b</sup>
	Residual	26.481	144	.184		
	Total	66.979	149			

a. Dependent Variable: PI\_total

b. Predictors: (Constant), PQ\_total, P\_total, SI\_total, PEOU\_total, PU\_total

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.269	.388		.693	.489	-.498	1.036
	PU_total	.048	.057	.061	.841	.402	-.065	.162
	PEOU_total	.102	.096	.068	1.067	.288	-.087	.291
	P_total	.069	.108	.035	.635	.526	-.145	.283
	SI_total	.266	.049	.326	5.386	.000	.168	.364
	PQ_total	.462	.064	.493	7.240	.000	.336	.589

a. Dependent Variable: PI\_total

## Appendix C



**UNIVERSITI TUNKU ABDUL RAHMAN**  
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Re: U/SERC/121/2019

5 August 2019

Ms Malathi Nair a/p G Narayana Nair  
Department of International Business  
Faculty of Accountancy and Management  
Universiti Tunku Abdul Rahman  
Jalan Sungai Long  
Bandar Sungai Long  
43000 Kajang, Selangor

Dear Ms Malathi,

### **Ethical Approval For Research Project/Protocol**

We refer to your application for ethical approval for your research project (Master student's project) and are pleased to inform you that your application has been approved under expedited review.

The details of your research project are as follows:

<b>Research Title</b>	A Study on Generation Y's Perception Towards Chinese Smartphones Brands
<b>Investigator(s)</b>	Ms Malathi Nair a/p G Narayana Nair Goh Li Jie (UTAR Postgraduate Student)
<b>Research Area</b>	Social Sciences
<b>Research Location</b>	Klang Valley
<b>No of Participants</b>	150 participants (Age: 23 - 38)
<b>Research Costs</b>	Self-funded
<b>Approval Validity</b>	5 August 2019 - 4 August 2020

The conduct of this research is subject to the following:

- (1) The participants' informed consent be obtained prior to the commencement of the research;
- (2) Confidentiality of participants' personal data must be maintained; and
- (3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

**Kampar Campus** : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia  
Tel: (605) 468 8888 Fax: (605) 466 1313  
**Sungai Long Campus** : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia  
Tel: (603) 9086 0288 Fax: (603) 9019 8868  
**Website**: www.utar.edu.my





Should you collect personal data of participants in your study, please have the participants sign the attached Personal Data Protection Statement for your records.

The University wishes you all the best in your research.

Thank you.

Yours sincerely,



**Professor Ts Dr Faidz bin Abd Rahman**  
Chairman  
UTAR Scientific and Ethical Review Committee

c.c    Dean, Faculty of Accountancy and Management  
         Director, Institute of Postgraduate Studies and Research

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