EXPLORING THE FACTORS AFFECTING PURCHASE INTENTION OF SMARTPHONE: A STUDY OF YOUNG ADULTS IN UNIVERSITI TUNKU ABDUL RAHMAN, PERAK CAMPUS, MALAYSIA

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DECLARATION

We hereby declare that:

(1) This undergraduate research project is the end result of our 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.

(3) Equal contribution has been made by each group member in completing the research project.

(4) The word count of this research report is 12943words.

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DEDICATION

This work done is especially dedicated to:

MrK.Raja Kumar a/l K.Kathiravelu

and

To our families and our loved ones,
Thanks for being there when we needed you the most.

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LIST OF ABBREVIATIONS

DV   Dependent Variables

IV   Independent Variables

SPSS   Statistical Package for Social Science

RA   Relative Advantages

P   Price

C   Compatibility

SI   Social Influence

PI   Purchase Intention

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Preface

Nowadays, Smartphone has dramatically become a part of life tool for people around the world. Especially for young adult, they use their phone to communicate with people, reminding themselves for urgent cases, download songs and games, texting message and so on. Smartphone has the ability to provides, obtain, and shares personal and social information. Through these benefits, young adults can create visual form of communication method, update their status in time, and interacted with each other in anytime and anywhere. Smartphone also provided the benefits that integrated with PDA, which have the capabilities of integrating wireless connections and mobile devices.

Although the demand of young adults towards smartphone in market is high, there is still a slow growth of market demand in certain area. The motivation of young adults to adopt a smartphone in Malaysia is slightly lower than neighbor country, such as Singapore. Smartphone firm does not have better understanding the preferences of consumer to own a smartphone. Due to the reason of young adults does not have a clear picture to own a smartphone, firms will face the difficulty of fast growth on the business and difficulty to expand business as well since young adults is the biggest target market. Hence, a slow adoption on smartphone devices may become a vital for the continuous growth and expansions for business.

The main purpose for the research is to explore the factors affecting purchase intention of smartphone: A study of young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. Researchers have identified four factors that affecting purchase intention of smartphone during this research, which included relative advantages, price, social influence, compatibility. Throughout this research, firms may have a better understanding on how young adults intention to purchase a smartphone.

Abstract

This research study was carried out to explore the factors affecting purchase intention of smartphone: A study of young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. Researchers had examined four factors that affecting purchase intention of smartphone. Factors included relative advantages, price, social influence, compatibility. Diffusion of Innovation Theory, Social Identity Theory and Theory of Materialism were being used to explain the independent variables and dependent variables. This study was a descriptive research study. Quantitative data collection method and convenience sampling method had been used. The target population is undergraduate and foundation young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. This study used primary data collection method and secondary data collection method. Journal, internet research and text book had been used as secondary data collection. Questionnaire-based survey was used and 400 sets of questionnaires were distributed to respondents and being analyzed by using SPSS.

Descriptive analysis, reliability test, Pearson correlation coefficient test, multiple regression analysis and central tendency were being chosen as data analysis techniques. The questions and scales in questionnaires were considered to be reliable as the entire Cronbach's Alpha was more than 0.7 which was indicated as very good. Based on Pearson correlation coefficient analysis, the results indicated that there was no multicollinearity problem which is not more than 0.9. There was a positive relationship between independent variables and dependent variables. According to the ANOVA table, R square showed that the independent variables were significant to explain the variance in consumers' confidence level. R square indicated that there was 52.1% of the variation in dependent variable can be explained by independent variables. Three hypothesis proposed in this research were accepted.

CHAPTER 1: INTRODUCTION

1.0 Introduction

The research conducted is to explore the factors affecting purchase intention of smartphone: A study of young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. This study will begin with the research background, problem statement, following by objective of the research, research questions, hypothesis, and significance of the study, chapter layout, and conclusion of the chapter.

1.1 Research Background

Most of the mobile phones nowadays are addressed as 'Smartphone', because they offer more advanced computing power and connectivity than a contemporary mobile phone. Along with the smartphone fundamental capabilities to make voice call, video call, SMS, and MMS, smartphone have been repositioned as a "new information medium" (May & Hearn, 2005). At the same time, it also summarized that a smartphone will have more innovative wherewithal compared to normal cell phones which concluded both PDA and cell phone in a smartphone. Therefore, the society has slowly moved their cell phone purchasing decision to smartphone (Min, et al., 2012).

Cell phones are by far the most popular mobile technology among young adults, with 81% having their own cell phone (Edison, 2010). It is also worth noting that 43% of young adults' cell phone owners have a smartphone (Edison, 2010). Smartphone technology, with its pervasive acceptance and powerful functionality,

is inevitably changing peoples' behaviors; especially young adults using smartphone frequently today. CourseSmart, which is the world's largest provider of digital course materials and eTextbooks, found that university students can't go long without checking their digital devices, including smartphone, laptop and more (CourseSmart, 2011).

It's very common to see university students checking Facebook status, check email or other social network sites using smartphone with their constant web connection feature nowadays. According to the info graphic research that have done, 57 percent of university students use smartphone, 60 percent feel addicted to their phone, while 75 percent of them sleep next to their phones, 88 percent texted in class before, 97 percent who have smartphone use them for social networking, and 40 percent used smartphone to study before test (Alexander, 2011). Therefore, consumers are keeping themselves with high concern with technologies might change their devices from time to time. In other words, devices can be easily be replaced due to the fast pace of advancement in technology. Hence, it is essential to know that what factors that actually affecting purchase intention of smartphone among the young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

1.2 Problem Statement

Smartphone's demand has increasing nowadays in worldwide typically in western countries (Kathy, 2012). However, the adoption rate of smartphone in Malaysia is still slow comparing to other nation in South-East Asia such as Singapore. In Malaysia, there are 28.1 million of population and record of 36.6 million of mobile phone subscription. Among the 36.6 million subscriptions, only 14.21% of them are using smartphone which is 5.2 million only. The other 85.79% are using feature phones or basic cell phones which have the number of 31.4 million subscriptions (Anson, 2012). Among the 14.21% (5.2 million) of smartphone

users in Malaysia, 64.3% of them fall between ages 19-26 which fall under the categories of young adults.

Although most of the smartphone users in Malaysia are younger consumers, but the motivation to adopt the smartphone among young adults in Malaysia toward smartphone is very low, which mean that not all young adults would like to purchase a smartphone or change from basic phone to smartphone. Comparing to Singapore, the percentage of smartphone users in Singapore was 53.41% while others are basic phone users. Anson (2012) has analyzed that among the 53.41% smartphone users in Singapore, young adults users has stand up for 41.23%. Meanwhile, young smartphone users in Malaysia are only below 9% (14.21% overall smartphone user in Malaysia) among the overall mobile phone subscription including both smartphone and basic phones. (GO-Gulf.com, 2012).

According to the problem occurred, the research clearly identify that smartphone are getting popular among young adults in other countries but not so successful in Malaysia. According to the statistic made by Anson (2012), most of the smartphone users in Malaysia are younger generation which means that younger generation can adopt new technology device or new product faster compare to older generation. The only problem is the motivation for young adults in Malaysia to purchase smartphone is very low. To increase the demand of smartphone in Malaysia, the first step is to target the right target market which is young adults. In order to solve this problem, the research has to identify why young adults in Malaysia are not addicted much to smartphone and need to understand their purchase intention.

1.3 Research Objectives

In this section, the purpose of the investigation includes general objectives and specific objectives. The objectives are flow from the problem statement and provide us with specific and achievable goals.

1.3.1 General Objective

The main objectives that want to achieve is to investigate the factors that affecting purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

1.3.2 Specific Objective

The research intends to link the existing knowledge gaps by investigate the impact between social influence, relative advantages, compatibility, price and purchase intention of smartphone. In order to achieve the objective, we come out with a few sub-objectives:

1.3.2.1   To investigate the impact between social influence and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

1.3.2.2   To investigate the impact between relative advantage and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

1.3.2.3   To investigate the impact between compatibility and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

1.3.2.4   To investigate the impact between price and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

1.3.2.5   To identify the factors which are most significantly influence purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

1.4 Research Questions

1.4.1 General Question

The general question of this research is "What are the factors that affecting purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

1.4.2 Specific Question

To gain insights for the topic in accomplishing our objectives, several research questions are formed:

1. Is social influences has any impact on purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia?
2. Is relative advantages has any impact on purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia?
3. Is compatibility has any impact on purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia?
4. Is price has any impact on purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia?
5. Among these factors, which factors have the most significantly effect on purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia?

1.5 Hypotheses of the study

Based on the research question generated from above, hypotheses developed are:

H1: There is a significant influence from social influence towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H2: There is a significant influence from relative advantage towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H3: There is a significant influence from compatibility towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H4: There is a significant influence from price towardspurchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H5: At least one factor (Social Influence, Relative Advantage, Compatibility and Price) have the most significant influence on purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

1.6 Significance of the Study

This study will significantly provide the contribution of better concept for the firms to understand better on the factor that affecting purchase intention of

smartphone among young adults. Smartphone firms such as Apple, Samsung and HTC may gain information about the factor that cause consumer to request a smartphone and understand the features of smartphone that request by consumer such as taste, design, colors, application and also price setting.

The firms can have a better strategies planning with an accurate information and certainty on consumer. Understanding the factors that have influenced their purchase intention, future researchers or smartphone companies in Malaysia can refer to this research to understand more what young generation in Malaysia think, how to trigger their purchase intention and increase the sales among young adults in Malaysia. Therefore, it can improve the movement of motivation to adopt the smartphone among young adults in Malaysia toward smartphone.

Secondly, this research may benefit the firm on understanding how does consumer to perceive the product via knowledge, past experience of using similar product, value, belief, and need (Lewis, 2012). The more the innovation is perceived to be consistent with existing procedures, belief and value systems, the greater the chances are for its adoption (Brummans, 2006). Consumers will have a positive perception towards product as the firms have make it to fulfill market demand, as the product is giving a lot of benefits.

The firm may benefit from understand how the social influence the buyers. Most consumers' behavior models recognize social influence as an important component of the decision-making process (Mourali, Laroche, & Pons, 2005). Word of mouth is an important driver of consumer behavior on such as the adoption of a new technology products, the decision to see a movie, or the preferences of which laptop or smartphone to purchase. It may affect awareness in some cases, or preferences in others (Godes & Mayzlin, 2004). Therefore, the organization not only can focus on their specific target market, but also can deliver the message to the relative of consumer.

1.7 Chapter Layout

In this research, it divided into the five chapters where each chapter focuses on the different area.

Chapter 1 is the general view of the study content which contain of research background and problem statement. Besides, it also involve the research objective which mention the purpose of this research, follow by the research question, hypotheses of study, significant of study, chapter layout and conclusion of the chapter.

Chapter 2 is the literature review which overview all the relevant sources that related to the topic which is dependent variable (purchase intention of smartphone), independent variable (social influence, relative advantages, compatibility and price). Moreover, conceptual framework is also included which assists researchers to more understand and specific the critical variable. This chapter will be ended with hypothesis development.

Chapter 3 is to discuss the detail about the research methodology that we used and the data collection process. This chapter will start from the types of research design, data collection method, and sampling design. Besides, it also explain about research instrument which will discuss the reason, instruments, procedures and activities that being used in the data collection. Last but not least, constructs measurement, data processing and data analysis are also highlighted in this chapter.

Chapter 4 presents an overall of the result and the finding from the analysis of the data collected. Other than that, Statistical Package for Social Science (SPSS) is use in this research to illustrate the chart and tables.

Chapter 5 includes discussion and conclusion of this research. Research findings will be summarized and major findings in this research will be discussed. Besides,

there contain limitations of this research for further improvement as well as provide some recommendations for future research.

1.8 Conclusion

As a conclusion, this chapter provides an overview of whole research study. In research background, there is a discussion about demand of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. Besides, there is a highlight about the problem statement. Follow by the research objective, research question and hypotheses for the research study that used to provide guidance for the correct direction of this study. Lastly is the significant of the study. By doing so, the information that gathered in this chapter can be serve as precedence for the following chapters. In the next chapter, there have further discussion on both dependent and independent variables.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter involved with discussion on the literature review and following by discussion on relevant theoretical model, conceptual framework and developing hypotheses. Initially, existing literature to understand and identified existing trends and relationships between variables, in order to generate new ideas has been reviewed. Afterward, dependent and independents variables based on the existing literature were defined. By referring relevant theoretical models, construction of conceptual framework has been done. Lastly, the hypothesis for verification of theory has been formulated.

2.1 Review of Literature

The purpose of literature review is to review the critical points of current knowledge including substantive findings as well as theoretical and methodological which contribute to research topic in hand. Other than that, literature reviews also known as secondary sources, it only reporting the past research and do not unveil any new or original research information.

2.1.1 Dependent Variable

2.1.1.1 Purchase Intention

Purchase intention can be defined as an advance plan to purchase certain good or service in future, this plan may not always lead to implementation, because it affected by ability to perform (Warshaw & Davis, 1985). In other word, what the consumer think and will buy in their mind represents the purchase intention (Blackwell, Miniard, & Engel, 2001). Besides that, purchase intention can also determine the possibility of a consumer lead to purchase action, through identify the intensity of purchase intention, there is a high possibility to purchase particular product when the purchase intention is stronger (Dodds, Monroe, & Grewal, 1991; Schiffman & Kanuk, 2000). Purchase intention shows that consumers will follow need recognition, information search through external environment, evaluation of alternatives, make purchase decision and post-purchase experience (Zeithaml, 1988; Dodds, Monroe, & Grewal, 1991; Schiffman & Kanuk, 2000). Furthermore, consumers' perception on relative advantage of smartphone and efforts required to obtain a smartphone have significant influence on purchase intention. The effort required to obtain a smartphone includes price, search time, availability and so on. Perceived value is one of the factors may trigger the purchase intention, the perceived value come from the relative advantage and product compatibility as compared to efforts needed to obtain a product, the efforts can be product price and search time, the greater perceived value is, the greater possibility leading to purchase intention and purchase action (Monroe & Krishnan, 1985; Zeithaml, 1988). Moreover, purchase intention also treated as metric for prediction of consumer purchasing behavior (Bonnie D, Teresa A, Yingjiao, & Raul, 2007). Besides that, the intention to purchase is known as consumers' tendency to behave on an object; it usually measured in terms of intention to buy (Kim & Kim, 2004). The idea of intention to purchase toward particular products or services is the final cognitive step in the decision making process of purchase intention, this statement agreed

by most of the past researchers (Agarwal & Teas, 2002; Erevelles, 1993; Fishbein M. , 1967 ; Han, 1990; Pecotich, Pressley, & Roth, 1996). In additional, marketers are interested to purchase intention, because it can help them in market segmentation and support their decision making like where the product should be launch (Sewall, 1978; Silk & Urban, 1978). Other than that, purchase intention can be used for future demand prediction too (Armstrong, Morwitz, & Kumar, 2000). Lastly, there are positive relationships between relative advantage, price, social influence and product compatibility with purchase intention (Joep W, Ruud T, & Tammo H, 2011; Juha, 2008; Yue & Stuart J, 2011).

2.1.2 Independent Variable

2.1.2.1 Price

Price is one of the most important cues in marketplace. The economics and consumers elements can be used to interpret the view about price. Price is represented as constraint to be trade-off products for each unit with maximum utility from economics perspective. No hidden information exists in exchanging products in marketplace. The issue of price has been discussed as critical factor requiring consideration with limited budget on purchase intention (Erickson & Johansson, 1985). Even it is in intrinsic attribute information (Mitra, 1995). A set of acceptable price range is established when consumers purchase products. Purchase intention tends to be reduced when the actual price on products is higher than acceptable price range and vice versa (Dodds W. B., 1991). If the price is lower than acceptable price range seriously, consumers are lack of confidence towards the products quality (Peter, 1969).

With reference to (Jacob & Olson, 1977), this paper argued that the price is a cue to simulate the consumer's perception on purchasing products and the price can reflects psychology response on consumers mind after

contacting price. Simultaneously, the consumer makes decision whether to buy the product or not based on integrated all information. It was based on the well-known model which is known as 'Simulate-Qrganism-Response model' (S-Q-R Model) to explain. The price is a helpful cue to infer by consumer's internal knowledge related to products (Erickson & Johansson, 1985). Similarly, the other also prove Jacoby's model in advance that it indicates that price standard is estimated by perceived quality and perceived sacrifice (Monroe & Krishnan, 1985). It means high price results in high product quality and eventually enhances purchase intention directly. In terms of Monroe's concept, the role of price which influenced purchase intention was not only includes perceived quality but also perceived sacrifice (Lefkoff-Hagius & Mason, 1993).

2.1.2.2 Compatibility

Compatibility of product is company need find some way to fits the past experiences and the needs of the potential adopters used to fulfill and satisfied customers need. Compatibility is also an important issue in a market with demand externalities and the purchase intention of customers (Gatignon & Robertson, Innovation Decision Process, 1991). For communications networks, the question is whether subscribes of one network can communicate with subscribers of one networks. Compatibility influences the extent of the externality, thereby influencing the optimal strategy. Furthermore, where positive demand externalities result from the reduction of uncertainty, the word compatibility can be refers as to the extent to which one product is similar enough to benefit from the same word of mouth (viral) base effect as another product (Xie & Sirbu, 1995).

Farrell and Saloner (1986) also examine the effects of compatibility and installed base in new entrants, potential users arrive over time at an exogenously determined rate and select between an incumbent standard and a new technology (Farrell & Saloner, 1985). Besides, a system of compatible components is treated as a single good characterized by

positive purchase intention of customers. Such network externalities arise because the utility a consumer obtains from a system increase with the number of others using compatible products (Katz & Shapiro, 1986).

Product compatibility is a unique outcome of symmetric perfect and firm should decide whether to make their product compatible before competing in prices (Farrell & Saloner, 1985). When a firm focus a lot on their product compatible, product compatibility can enables consumers to build their system that is closer to their ideal, preference and expectation. This can shift the demand curve upwards and makes the market more profitable. Moreover, compatibility of a product can weakens each firm's incentives to cut prices, when company sell incompatible components, a decrease in one firm's price will increase its sales at the expense of its rivals (Farrell & Saloner, 1985).

2.1.2.3 Relative Advantage

Relative advantage is the degree to which an innovation is perceived as better than the product it supersedes, or competing products (Tidd, 2010). It is typically measured in narrow economic terms such as economic profitability, social prestige, or other benefits. (Tidd, 2010 ; Rogers, 1995). The nature of the innovation determines what specific type of relative advantages is important to the people, although the potential adopter's characteristics also affect which sub dimensions of relative advantages (Rogers E. M., 1995).

Besides that, the degree of relative advantage is often expressed as an innovation that appears far superior to previous idea offers a greater relative advantage such as reflected in lower price, physical improvements, or eases of use and increases the product's adoption rate. (L.Kurtz, H.F.MacKenzie, & Snow, 2009). Relative advantage can be measured in terms of economic factors, such as social status, convenience, economic

gains, and low cost. An innovation that offers a greater advantage is believed to have greater acceptability, higher diffusion speed (Ho & Wu, 2011). The current innovation literature has established that relative advantage is one of the best and most consistent predictors of innovation adoption (Roach, 2009).

Relative advantage refers to the benefits of adopting the new technology compared to the costs. Besides dollar price, high-tech products can lead to a type of psychic cost, which is the emotional worry (J.Mohr, Sengupta, & F.Slater). Users perceive advantages in style, design, status and dependability relative to other comparable innovations. If a product is very expensive compared to other product brands, potential buyers may experience a very low 'economic advantage' (Sypher, 1997).The customer will have fear, uncertainty, and doubt about whether the technology will deliver the promised benefits, and the customer will have the skills and capabilities to realize those benefits (J.Mohr, Sengupta, & F.Slater). In the context of mobile phone marketing, relative advantage is conceptualized as the degree to which consumers perceive this channel to be better than its alternatives (Roach, 2009).

2.1.2.4 Social influences

The research tries to enhance understanding of social influences on purchase intention within the context of the communities of virtual consumer. Virtual communities can be an important source of social influences on purchase intentions (Bickart & Schindler, 2001). They are based on interactions of social, where some relationships are built and interests are shared (Lin, 2008). Members within these communities seek and share information that is related to the product brand and stores. Because of this lack of insights within the area of virtual consumer communities, it enhanced a better knowledge regarding with social influence that effect on purchase intention within these customers. The

concept of customer intention is dominantly based on the TRA (Fishbein & Ajzen, 1975). TRA accounted for social influence effects on intentions by the inclusion of the subjective norm concept.

The notion that humans are influenced by the choices, behaviors and also belief of others has become nearly axiomatic across the social sciences; the sheer number of terms used to describe this process is indicative of its ubiquity, it starts from social influence to social proof to peer pressure to bandwagon effects to conformity to herding (Cialdini & Goldstein, Social influence: Compliance and conformity, 2004).

The impact of social influence has been demonstrated in countless domains, including littering (Cialdini, Reno, & Kallgren, 1990), voting (Gerber, Green, & Larimer, 2008), donating to charities (Reingen, 1982), expressing prejudice (Apfelbaum, Sommers, & Norton, 2008), choosing jobs (Higgins, 2001), investing in the stock market (Hong, Kubik, & Stein, 2004), and, most relevant to the current investigation, both adoption and rejection of consumer products (Berger & Heath, 2007).

Social influence motives direct information processing by focusing people on a relevant set of information involving reality, relations with others, and the self. As we explain in the remaining sections of this article, these influence motives can alter the social meaning of consumption and purchasing decisions (Asch, 1951). Social influence research has demonstrated these changes in meaning, especially by applying the values and ideologies shared with self-relevant social groups.

In social influence settings, changes in meaning potentially emerge as people try to understand, relate to others, and be themselves. Thus, any one of the influence motives might yield changes in the meaning of an issue, product, or brand. However, most of the research on meaning change to date has focused on one particular motive, the desire to align with valued reference groups and differentiate from devalued ones. As we explain,

people shift the meaning of a variety of issues and consumer judgments when social identity concerns are salient (Asch, 1951).

2.2 Review of Relevant Theoretical Models

2.2.1 Diffusion of Innovations Theory

Diffusion of innovations theory explains the livelihood that a new product will be adopted by consumer in particular culture structure. There are four stages to influence a consumer to adopt or not to adopt particular new product, which are knowledge, persuasion, decision and confirmation (Rogers E. , 1995; Fliegel, Frederick, & Joseph, 1966).

In persuasion, it includes all the factors may influence the consumer adoption of new product. All the factors was categorized as perceived characteristics of innovations or product characteristics, which include relative advantage, trial ability, compatibility, complexity, and so on. It also may affect by communication sources (Rogers E. , 1995; Assael, 1992; Gatignon & Robertson, A propositional inventory for new diffusion research, 1985).

In the end, those factors in perceived characteristics of innovations will affect purchase intention, purchase intention can also be treated as the same level as willingness to purchase a product, it usually needs to follow by ability to purchase, and both works together will create demand for the new product (Rogers E. , 1995; Fliegel, Frederick, & Joseph, 1966).

Figure 2.1: Diffusion of innovations model.
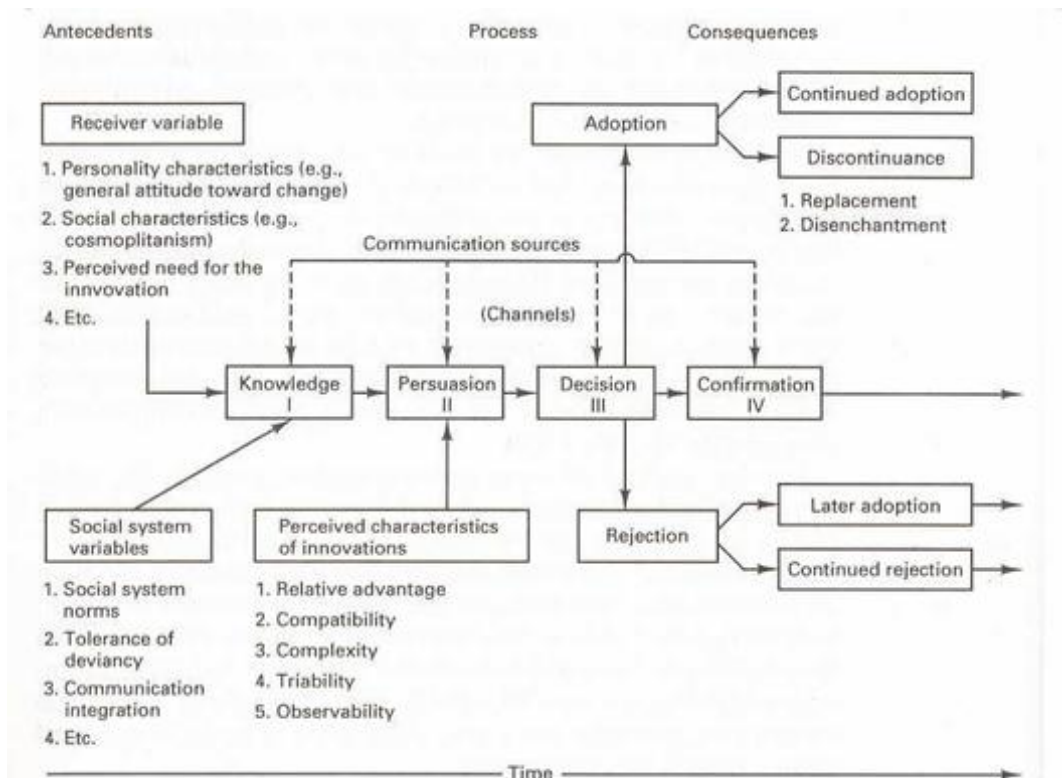
Source:Rogers, E.M. (1995). *Diffusion of innovations (4th edition)*.The Free   Press. New York.

2.2.2 Social Identity Theory

Social identity theory originated by Tajfel and Turner in 1979, which explain the member of particular social group need to follow all the conditions of their group to avoid being discriminate. In the social identity theory, different social contexts may affect the way an individual to think, feel and do to his personal, family or national "level of shelf" (Turner, 1982; Jane & Peter, 2000).

Social identity theory refer to individual in the particular social group self-categorization themselves in the ways conform to their group norms or do everything that may favor to the group. According to Turner and Tajfel (1986), the individuals' action to categorizing themselves as one of the

group members was enough for them to display in-group favoritism (Jane
& Peter, 2000; Abrams, 1992).

If most of the member in particular social group adopted the smartphone,
the individual who not yet adopt in that social group will consider adopting,
because he or she want to be categorized in that social group, and want to
be part of them (Jane & Peter, 2000; Abrams, 1992).

2.2.3 Theory of Materialism

Materialism have some level of impact on people's lives and also relate
with wellbeing, people are happy when they possession of certain luxury
product, thus they use all the ways to pursuing them. People who are
strong in materialistic are integrated with desires and goals to attain wealth
in order to processions of certain luxury products that impress others and
also can gain some sense of social recognition (Tim, 2002; Yusuf &
Abdullah, 2003).

Theory of materialism explain the consumer will perceived high value on
all luxury product, which including high innovative or new technology
product, because this kinds of products are usually charge at unreasonable
high price (Vitzthum, 1995 ; Lange, 1925).

Moreover, smartphone may affect the purchase intention of consumer, but
it must charge at abnormal high price. As an example, the luxury product
like smartphone will become a normal good or even an inferior good, if the
purchasing power of overall consumers increased, which mean that
everyone can possess the smartphone, thus it no longer can be the badges
of social status (Moser & J.D, 1995; Jee Han, Joseph, & Xavier, 2010).

2.3 Proposed Theoretical Framework

Proposed theoretical or conceptual framework is a diagram that shows the display of both dependent variable and independent variables and connects or links those variables to form a test on this study. The framework below are modified from the literature review, there are four independent variables (Price, Product Compatibility, Relative Advantage and Social Influences) that are developed to identify their relationship with dependent variable (Purchase Intention of Young Adults).

Figure 2.2: Theoretical Framework

Independent Variables (X)   Dependent Variable (Y)
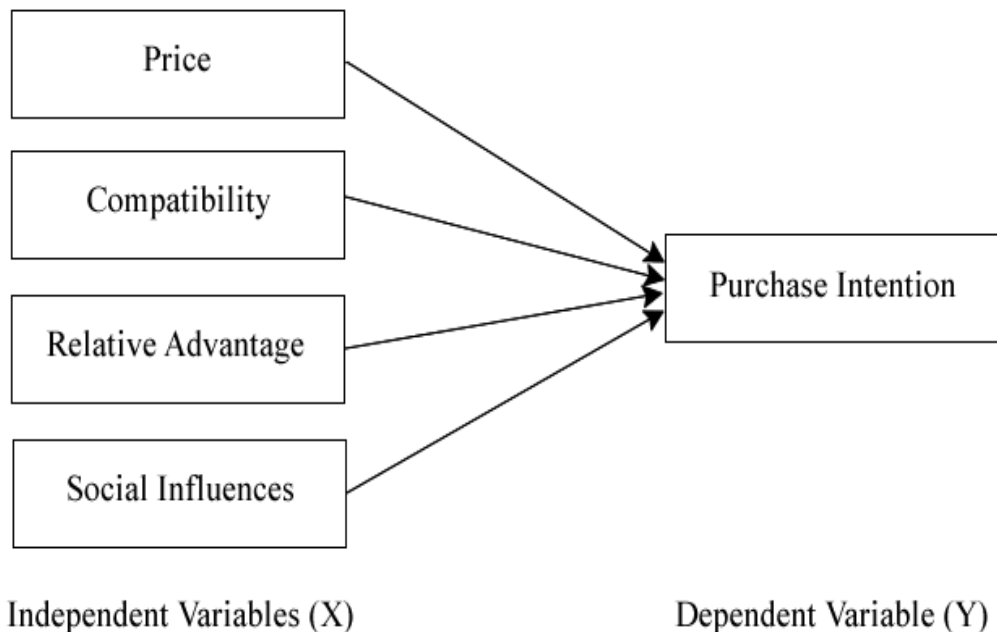
Source: Developed for the research

2.4 Hypotheses Development

Based on the past empirical studies, the following hypotheses are proposed.

H1: There is a significant influence from price towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H2: There is a significant influence from compatibility towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H3: There is a significant influence from relative advantage towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H4: There is a significant influence from social influences towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H5:   At least one factor (Social Influence, Relative Advantage, Compatibility and Price) have the most significant influence of the purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

2.5 Conclusion

This chapter consists of the documentation of a comprehensive review of the published and unpublished information from the secondary sources that related to factors that would affected customers purchase intention. In this chapter, the tasks that competed are the literature review, relevant theoretical model review,

constructed conceptual framework and formulated hypotheses regarding this research topic.

This chapter was able to complete by gaining useful information and references that made by other researches to support the research topic and fill up the blank of the studies. Besides that, the other things that included in this chapter are extracted the relevant information, identify the problem and opportunities, generated new ideas and argued on the relevant statement. In next chapter, the researchers would proceeding to research methodology to ensure that the methods of study to be carried out.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter discuss about the introductory overview of the research methodology. It includes the nature of study, research design, methods of data collection, sampling process, sampling design, questionnaire design, pilot testing, constructs measurement, data processing and methods of data analysis. After that, the sources of both primary and secondary data were being identified.

3.1 Research Design

This research is a descriptive research. Descriptive research was used to gives researchers an opportunity to use quantitative data in order to find data and characteristics about the population or phenomenon that is being studied. Advantage of descriptive research is the unique data collection form of case studies. This data collection allows descriptive research to provide an insight into life experiences in a way that other research methods can't (Swindells, 2004).

A quantitative research design is used as its objectives is to firm up and modify knowledge first gained in a fundamentally qualitative way which is consistent with the research (Bryman, 1984). Moreover, it contains several advantages such as finalizing result and approving or disapproving hypothesis.

Lastly, questionnaire was used in the research. A questionnaire is a set of questions for gathering information from individuals. The reason of using questionnaires is because it can be administered by using mail, telephone, using face-to-face interviews, as handouts, or electronically (i.e., by email or through

Web-based questionnaires). It is fast, inexpensive, efficient, and effective method compared to others (Key & P., 1997).

3.2 Data Collection Methods

Data usually can be gathered through one or more methods. Carefully select the method of gathering the data is a must by considering few perspectives like the outcome and result get from this method so that the research only can be carry out in valid and recognized.

Generally, there have two types of data which is primary data and secondary data. Primary data consists of information gathered for some specific purposes and primary data is also collects through surveys and research. Secondary data is consists of information that already exists somewhere having being collected for some purposes. In order ensure that the valid and trusted of research, it normally will use both primary and secondary data.

3.2.1 Primary Data

Primary data refers to data observed or collected directly from first-hand experience. Primary data has collected for this research. Used the questionnaire to collect data from respondents to make research study on the factors that affecting the purchase intention of smartphone among students in UTAR, Perak Campus.

The questionnaires will be distributed to 400 target respondents in Universiti Tunku Abdul Rahman (UTAR), Perak campus. Respondents are required to answer all the 30 questions stated in questionnaires.

Initially, it used about 1 week to conduct the survey, 8 hours daily from Monday to Thursday. The survey was conducted daily from 9.00 a.m. until

5.00 p.m. The surveys were carried out from 14th June 2012 until 21nd June 2012.

3.2.2 Secondary data

Secondary data analysis can be literally defined as "second-hand" analysis. It refers as the information analysis that was either gathered by someone else (e.g., researcher and institutions) or for some other purpose, or often a combination of the two (Cnossen & Christine, 1997).

Secondary data can be classified into two sources, which is electronic based sources and paper based sources. In this research, it concentrated more on electronic based sources to search secondary data. These sources are internet and Universiti Tunku Abdul Rahman library online database. These sources are used to search for electronic relevant articles and journals. Besides that, the researchers also referred several reference books in UTAR library. By go through all of the steps above, the researchers are able to have in-depth understanding to the theoretical concept.

By using secondary data, several advantages will obtain by researchers. Secondary data is efficient because gathering new data can take a good deal of time and energy (Sorenson, H.T., Sabroe, S., & Olsen, 1996).

3.3 Sampling Design

Sampling is defined as the process of selecting a smaller group of people who basically have the same characteristics and preferences as the total group from which it is drawn is called sampling (Wrenn, Stevens, & Loudon, 2006). Sample is subset from population. A researcher need not select every item in a population because the results of a good sample should have the same characteristic as the

population as a whole (William G. Zikmund, 2009). It is very important for researcher to design their sampling framework, because it helps them to collect data in way of cost effective and work efficiency. Besides that, select the most appropriate sample from the population may provide more accurate answer while answering the questionnaire.

3.3.1 Target Population

The first step in sampling process involves target population. Target Population can be defined as the collection of elements or objects that process the information sought by the researcher and about which inferences are to be made (Malhotra, 1996).

The target population in this research is undergraduate and foundation students from Universiti Tunku Abdul Rahman, Perak Campus. The reason behind of target on this population is because there is high population of smartphone user are young adults (Edison, 2010). Moreover, UTAR students came from different state in Malaysia so there are high chances to survey with different students from different states all over Malaysia. Thus, the researchers can collect suitable data for this research from them.

3.3.2 Sampling Frame and Sampling Location

The second step in sampling process is sampling frame and sampling location. The sampling frame is a listing of the members of the target population that can be used to create and/or draw the sample (E.Stevens, 2006). Sampling location is a place or area being selected for collects the data.

Since target population for this research is young adults in who still study in university, the researchers have focused respondents who study in Universiti Tunku Abdul Rahman, Perak campus. The researchers will distribute the questionnaire directly for respondent and interact through face-to-face. The method that we use for sampling is convenience sampling, which is non-probability sampling. Therefore, there is no sampling frame for the research. The sampling location for this research is allocated in Kampar, Perak, Malaysia.

3.3.3 Sampling Elements

The third step of the sampling process is sampling elements. Sampling elements is that segment of the population actually chosen by the sampling process, it may sampling unit may contain one or more population elements. (Smith & Albaum, 2005).

Sampling element for this research is the young adults who pursue their study in Universiti Tunku Abdul Rahman, Perak Campus. The main reason of choosing young adult as sampling element is because intend to understand whether the relative advantage, price, compatibility, and social influences affect the purchase intention of smartphone among young adults.

3.3.4 Sampling Technique

The forth step in sampling process is sampling technique. Sampling technique has been divided into two categories which is probability and non-probability (Churchill & Iacobucci, 2009). Probability sample is a subset of a population that ensures a representative cross section by giving every element in the population a known nonzero chance of being selected. A non-probability sample is a subsets of a population in which little or no

attempt is made to ensure a representative cross section (McDaniel & Gates, 1998). Types of probability sample include simple random samples, stratified samples, and cluster samples. For type's non probability, it includes convenience sample and quota sample (Boone & Kurtz).

Convenience sampling is chosen to run the test. Convenience sampling is a non-probability sampling technique that attempts to obtain a sample of convenient elements. The interviewers will be left primarily to the selection of sampling units (Malhotra, 1996). Convenience sample is non-probability sampling techniques which have the advantages of relatively easy sample selection and data collection (Anderson, Sweeney, & Williams, 2008). In Convenience sampling, elements for the sample are selected based on the convenience of researcher (Black, 2011). In addition, it also can be used for focus group, pretesting questionnaires, or pilot studies. (Malhotra, 1996). Convenience sampling has allowed us to gain data in the way of least expensive and least time consuming. In this research, the researchers would distribute questionnaire to the targeted respondent which is the student in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

3.3.5 Sampling Size

Sample size refers to the number of elements to be included in the study (Malhotra, 1996). For this research, sample size of 400 respondents to participate in this survey. There are 400sets of questionnaire to be distributed to respondents as actual test. Pilot test is the best way to see whether a questionnaire is working as expected, and also may test the sampling procedure, field force and other resources (Bradley, 2007). Pilot test is being conducted for the survey in order to fully gain insights on whether the respondents will able to answer for all the questions and whether there have any grammatical error exist. 50 sets of questionnaire to be distributed for pilot test purpose before the actual test is conducted.

3.4 Research Instrument

This section explains the details of instrument used to conduct this study. Survey method is used and hence, it involves distributing a set of questionnaire to respondents to collect primary data.

3.4.1 Questionnaire

Questionnaire is a prepared set of questions used by researchers to record answers that are provided by respondents (Sekaran & Bougie, 2010). In this study, questionnaire is distributes to gather primary data from respondents on the factors that triggers the purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus. Furthermore, this method is also used to determine whether there is a significant relationship between the independent variables and the dependent variable. To conduct this survey, 400 sets of questionnaires are distributed to the public area in the university and intranet portal of UTAR student, the questionnaire is to be collected within 1 week.

3.4.2 Questionnaire design

The process of designing questionnaire is very important in order to obtain information effectively. There are two types of questions which can be included in a questionnaire, namely open-ended response question and fixed-alternative question (or closed-ended questions). Open-ended response questions are questions that pose some problem and ask respondents to answer using their own words (Zikmund, Babin, Carr, & Griffin, 2010). On the other hand, fixed-alternative questions are questions in which respondents are given specific, limited responses and are asked to choose the one closest to their own viewpoint. For this research, fixed-

alternative questions are used in the questionnaire. Such questions are designed in such a way that useful and relevant information can be obtained, and at the same time it can save a respondent's time in answering the questions. Practically, fixed-alternative questions are much easier to complete compared to open-ended response questions, which require the respondents to answer on their own and will certainly need longer time to complete. The questionnaire for the purposes of this study consists of section A and section B

3.4.2.1 Section A

This section of the questionnaire contains five questions about the demographic profile of individual respondent who takes part in this research. Typically the questions are used to ask gender, ethnic group (race), faculty (that students belong in Universiti Tunku Abdul Rahman) and personal spending (monthly) was asked in this section.

3.4.2.2 Section B

However, in section B, includes 20 questions for surveying respondents on the factors that trigger the purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus. There are 4 paths in section B which is relative advantages, compatibility, price and social influence that related to the topic discussed. Likert scale is used in this section which consists of five scales is applied to this part. Respondents are required to circle out their answer among the 5 scales which included strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5).

3.4.2.3 Section C

In section C, there are 5 questions included for surveying respondents mainly on the dependent variable which is young adults' purchase intention. Likert scale is used in this section too which consists of five scales. Respondents are required to circle out their answer among the 5 scales which included strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5).

3.4.3 Pilot Test

A pilot test was carried out to test the reliability of each attributes in the questionnaire. It is also important to ensure all wordings and phrases of the questionnaire are clear. In this study, pilot test are conducted in a tutorial class in Universiti Tunku Abdul Rahman, Perak Campus, 50 students in the tutorial class will participate for the pilot test regarding of the questionnaire. After the pilot test has being conducted and justify its consistency, the researchers distribute questionnaire in few blocks in Universiti Tunku Abdul Rahman which included block B, block D, block E, and block H. 50 sets questionnaire has been run for reliability test in order to check the reliability of the question.

Table: 3.1 Pilot Test

Relative Advantage	.729
Price	.764
Compatibility	.863
Social Influence	.823
Purchase Intention	.719

Source: Developed for the research

3.5 Construct Measurement

In the social and behavioral sciences, as in many other areas of science, the researchers typically assign numbers to various attributes of people, concepts or objects which are known as measurement (Hair et al., 2007). Measurement helps researchers to interpret and make conclusion to the study of scale is a measurement tool which generally applied to measure a question with a predetermined number of outcomes (Hair et al., 2007). Moreover, a scale may be defined as a tool or mechanism that provides a range of values by which individuals, events, or objects are distinguished as to how they differ from one another on the variables of interest in some meaningful way (Sekaran&Bougie, 2010). The purpose of scaling is to represent in quantitatively form, about an item's, a person's or event's place in the spectrum. There are four basic types of scales, which are ordinal, nominal; ratio and interval scale (Zikmund et al., 2010). In this research project, only nominal and interval scale being used.

3.5.1 Nominal Scale

A nominal scale is a simplest type of scale, and is used for variables in which each participant or observation in the study must be placed into one mutually exclusive and exhaustive category. According to Hair et al. (2007), contended that when practicing nominal scale, there are no quantitative information and no ordering regarding to the variables. Hence, the researchers use nominal scale to measure gender, race, education level, faculty in university and personal spending that asked in Section A.

3.5.2 Interval Scale

Interval scale is a scale that has both nominal and ordinal properties, but also captures information about differences in quantities, or distance of a

concept from one observation to the next (Zikmund et al., 2010). Interval scale basically using number to rate the variables so that the distances between the numbers are always equal (Hair et al., 2007). Interval scale not only indicates order, they also measure the distance between any two points on the scale. It helps researchers to compute the means and the standard deviations of the responses on the variables. The researchers applied interval scale because it is used by various researchers to measure concepts such as perceptions, attitudes, and feelings (Hair et al., 2007). Associated with interval scale, researchers normally measure and compute the results based on Likert scale. In general, there are 5 categories of responses consisted in this scale such as strongly disagree(1), disagree(2), neutral(3), agree(4), strongly agree(5). These scales are used in design of questionnaire in Section B.

3.6 Data Processing

According to Zikmund et al. (2010), data processing refers to data preparation process such as checking, coding, transcribing, and specifying any special or unusual treatments of data before they are analyzed. In this study, the data for this research are collected using a set of questionnaire. After collecting all the data that distributed to the respondents, every set of questionnaire will be checked twice to make sure respondents have answered every question. Checking is also necessary to ensure that respondents have provided their responses according to the instructions given or not. The answers provided by respondents are kept private and confidential, and the data are used solely for the purpose of the research.

3.7 Data Analysis Technique

In data analysis, some of the most common ways of simplifying data are by calculating the mean, percentage distribution, frequency distribution, and so forth.

Other than that, researchers can also use Statistical Package for the Social Sciences (SPSS) to analyze quantitative data effectively. Data analysis begins after the data have been collected and processed. In this research, researchers have used several types of analysis to analyze the findings such as pilot test, frequency distribution, Pearson Correlation Coefficient and Multiple Regression Analysis.

3.7.1 Descriptive Analysis

Descriptive statistics was used to explore the data collected from respondents, summarize and describe the data collected (Coakes, Steed & Price, 2008). It was useful due to it enable researchers to have an overview of the demographic statistics. Data collected from respondents is examined using the SPSS. Frequency distribution is adopted to present the respondent's demographic data. Objective of frequency distribution is to display number of responses associated with each value of variables. Central tendencies measurement will also be conducted.

3.7.2 Scale Measurement

3.7.2.1 Reliability Test

According to Sekaran and Bougie (2010), reliability of measurement is established by examining the stability and consistency. Consistency indicates how well the items (variables) measuring a concept group together as a set. Subsequently, the result achieved will be compared with the rules of thumb that showed in Cronbrach's alpha that interpret the coefficient alpha values. Any alpha values that less than 0.70 means that the correlation is weak. The alpha values which less than 0.70 is considered to have poor reliability (Hair et al., 2007).

3.7.3 Inferential Analysis

Inferential analysis is used to make judgments of the probability that an observed difference between groups is a dependable on or one that might have happened by chance in the study. In this study, Pearson's Correlation Coefficient and Multiple Regression Analysis were used.

3.7.3.1 Pearson Correlation Coefficient Test

Pearson Correlation Coefficient is a method that measures the strength of the linear relationship between two variables. It also indicates the direction, the strength and significant of the relationship among all variables. The value for a Pearson's correlation can fall between 0.00 and 1.00. The value of 0.00 means there is no correlation whereas 1.00 means that is a perfect correlation. Ho is rejected when P value <0.05, otherwise accept.

Table 3.2: Rules of Thumb about Correlation Coefficient

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

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

3.7.3.2 Multiple Regression Analysis

It is a method used to examine the impact of the factors that influence the purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus. Moreover, multiple regressions analysis will go through several independent variables into same type of regression equation and forecast a single dependent variable. It was used to determine whether the four independent variables (Social influence, Compatibility, Pricing and Relative Advantage) are significant to explain the variance in confidence level.

3.8 Conclusion

As a conclusion, this chapter was briefly discussed about the research design for framework, data collections, sampling design, research instrument, and scales of measurement that used in questionnaire. Next, researchers discussed about the data processing on how the researchers process the data after collected from respondents. Lastly, this chapter briefly summarized the analysis methods such as inferential analysis, measurement of scale and descriptive analysis that used to analyze the questionnaire data.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

In this chapter, data that obtained from survey was being collected and used with some level of sufficient precision to test the hypothesis as mentioned in chapter two (Mondofacto, 1998). This chapter, researchers' interpreted and presented the information that obtained from the survey through analyzes the information which is relevant to the research questions and hypotheses. Moreover, in this chapter consist of two parts, which are descriptive analysis and scale measurement. In descriptive analysis can be subset it into respondent demographic profile and central tendencies measurement of constructs. Respondent demographic profile is about their gender, race, faculty, and personal spending monthly. Central tendencies measurement of constructs that used to indicated the mean, mode and median. The second part is scale measurement; scale measurement is used to test the reliability and interpreted the inferential analysis.

4.1 Descriptive Analysis

The purpose of descriptive analysis is a branch of analysis, which is focus on summarization and description data that collected from the survey (Weiers, 2008). This part is to provide analysis on the demographic characteristics of the respondents that obtained from the survey, and used the analysis to make general observations on the data, such as gender, race, faculty, personal spending monthly, and so on.

4.1.1 Respondent Demographic Profile

Researchers had distributed 400 copies of survey questionnaires and had received 100 percent responses from respondents. There is no data is outlier, thus the researchers fully utilized the 400 copies of survey questionnaires and analyzed it.

Table 4.1: Respondents' Gender

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	232	58.0	58.0	58.0
	female	168	42.0	42.0	100.0
	Total	400	100.0	100.0	

Source: Developed for the research

Figure 4.1: Respondents' Gender
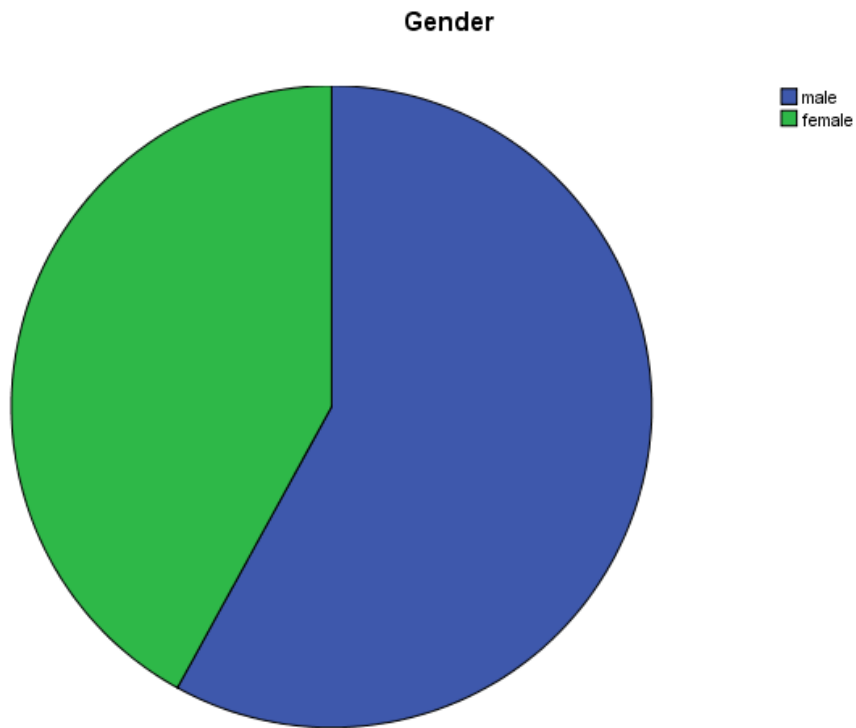
Gender

Source: Developed for the Research

Table 4.1 and Figure 4.1 show there is a total respondent of 400 participated in the survey questionnaire. The result of gender analysis consists of 232 male and 168 female. Percentage of male is 58%, whereas female is 42%, difference of 16%.

Table 4.2: Respondents' Race

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Indian	8	2.0	2.0	2.0
	Chinese	384	96.0	96.0	98.0
	others	8	2.0	2.0	100.0
	Total	400	100.0	100.0	

Source: Developed for the research

Figure 4.2: Respondents' Race
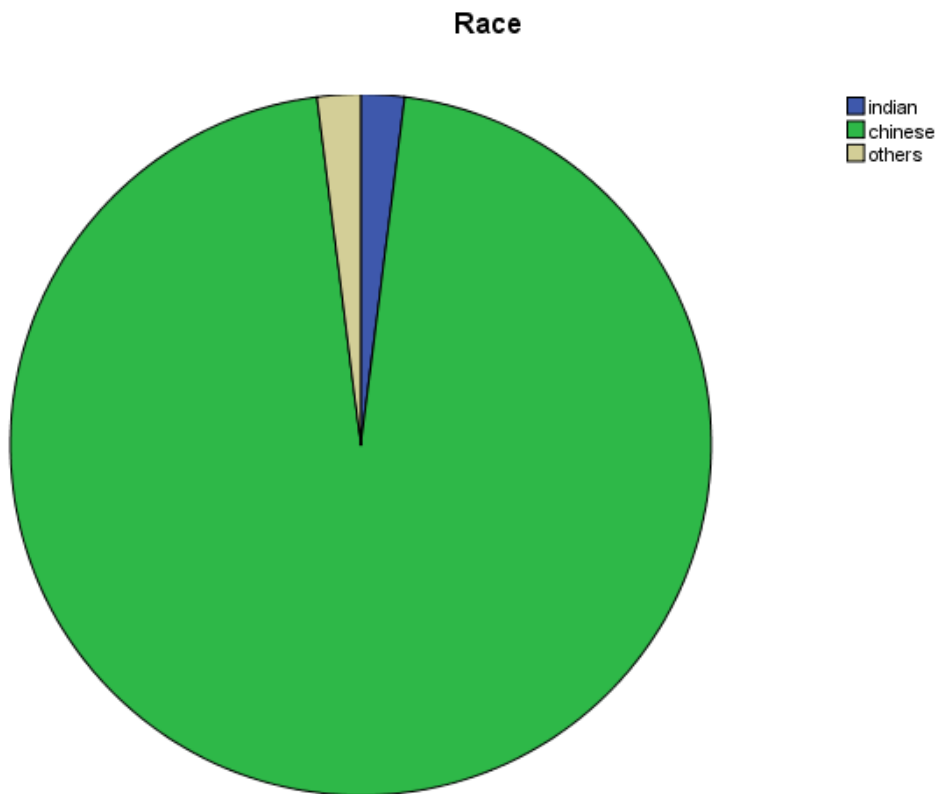
Source: Developed for the research

Table 4.2 and Figure 4.2 show the respondents' race groups. Based on the
data collected, most of the respondents are Chinese which amounted to 96%
or 384 out of 400 respondents. The second highest (also known as lowest)
are both Malay and others, which amounted to 2% or 8 out of 400
respondents.

Table 4.3: Respondents' Faculty

Faculty

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	arts & social science	88	22.0	22.0	22.0
	business & finance	256	64.0	64.0	86.0
	engineering & green technology	16	4.0	4.0	90.0
	information & communication technology	24	6.0	6.0	96.0
	science	16	4.0	4.0	100.0
	Total	400	100.0	100.0	

Source: Developed for the research

Figure 4.3: Respondents' Faculty
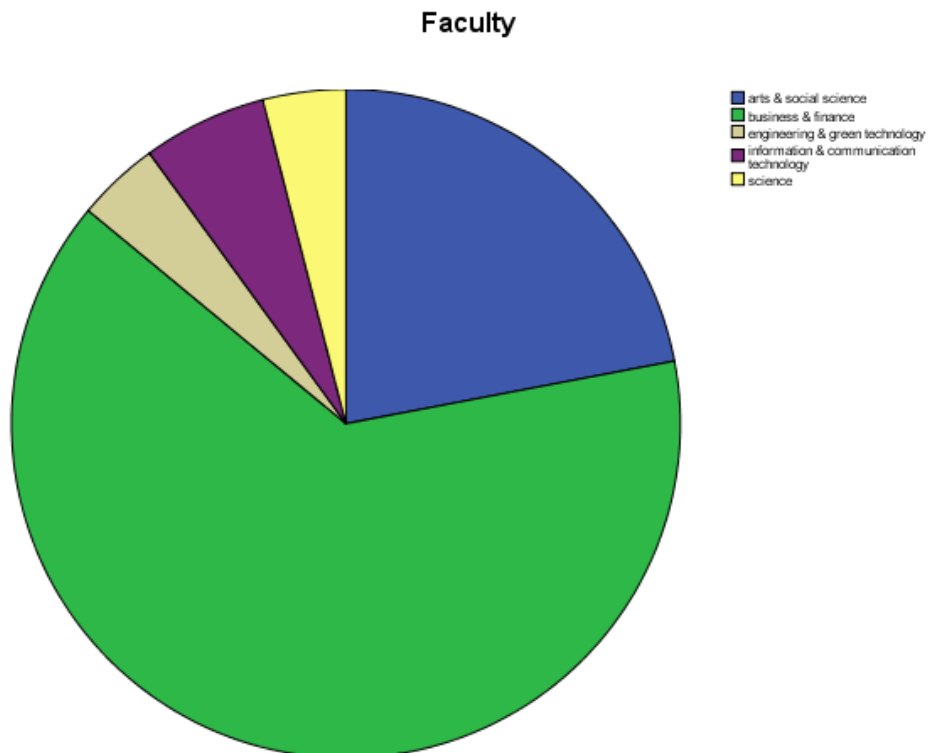
Source: Developed for the research

Table 4.3 and Figure 4.3 show five different faculty groups of respondents who answered the questionnaire. The respondents are majority came from business & finance faculty, which are256 respondents (64%). It followed arts & social science faculty with a frequency of 88 respondents (22%). The third highest are came from information & communication technology faculty which constituted 6% or 24 respondents. There are only 16 respondents (4%) came from both engineering & green technology faculty and science faculty respectively.

Table 4.4: Respondents' Monthly Spending

Monthly Spending

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RM500 or below	176	44.0	44.0	44.0
	RM501 - RM800	160	40.0	40.0	84.0
	RM801 - RM1000	56	14.0	14.0	98.0
	RM1001 - RM1500	8	2.0	2.0	100.0
	Total	400	100.0	100.0	

Figure 4.4: Respondents' Money Spending
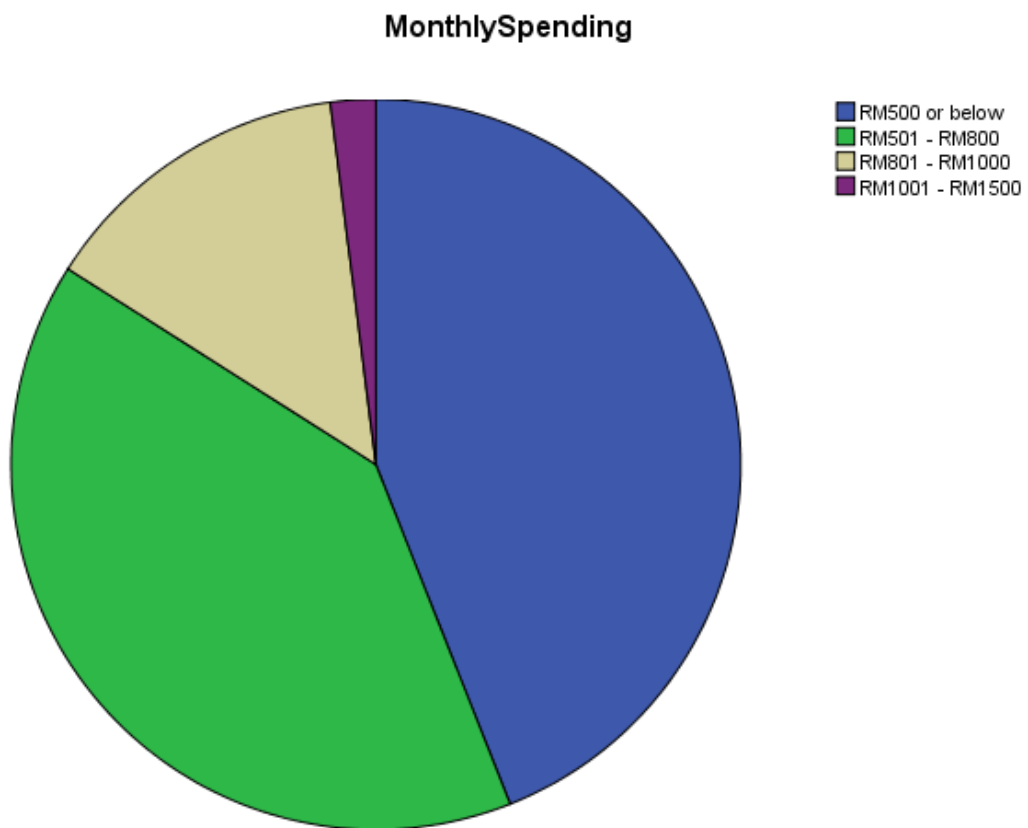
Source: Developed for the research

Table 4.4 and Figure 4.4 show the personal money spending level for every month RM500 or below reported the highest frequency, which are a total of 176 (44%) respondents. The second highest is in between RM501 and RM800 which has 40% or 160 respondents. The third highest is in between RM801 and RM1000 which has 14% or 56 respondents. In between RM1001 and RM1500 recorded the lowest frequency, with only 8 (2%) respondents.

4.1.2 Central Tendencies Measurement of Constructs

Table 4.5: Statistical Summary

Variables	Items	Mean	Standard Deviation
Relative Advantage	RA1	4.2250	0.89799
	RA2	3.9775	0.99724
	RA3	3.6850	0.89318
	RA4	3.4200	0.99048
	RA5	3.5125	0.92574
Price	P1	3.7025	0.80037
	P2	4.1200	0.94224
	P3	3.6050	0.96763
	P4	3.5150	0.91754
	P5	3.6475	0.86029
Compatibility	C1	3.3700	0.93557
	C2	3.1800	0.97467
	C3	2.9700	1.03284
	C4	3.2000	1.04294
	C5	3.1725	1.02488
Social Influence	SI1	2.9725	0.95867
	SI2	2.6825	0.91037
	SI3	3.3025	0.93175
	SI4	3.1200	1.03599
	SI5	2.4950	1.05487
Purchase Intention	PI1	3.5125	0.86412
	PI2	3.7250	0.85217
	PI3	3.1550	0.97383
	PI4	3.0325	0.97920
	PI5	2.8500	1.01493

Source: Developed for the research

According to Gravetter and Wallnau (2000), central tendency refers to statistical measure that identify a single value which act as representative of an entire distribution and aims to provide accurate description of the entire collected data. In this study, mean is used to measure the central tendency while dispersion is described by using standard deviation (Saunders, Lewis, & Thornhill, 2009).

RA1 has the highest mean value at 4.2250with standard deviation of 0.89799while RA4 shows the lowest mean value at 3.4200 with standard deviation of 0.99048.

P2 recorded the highest mean score 4.1200with standard deviation of 0.94224, while the lowest mean score (3.5150) is achieved by P4 with standard deviation of 0.91754.

C1 recorded the highest mean value (3.3700) with standard deviation of 0.93557, while C3 has the lowest mean value (2.9700) and appear to have standard deviation of1.03284.

SI3 has the highest mean value at 3.3025with standard deviation of 0.93175while SI5 shows the lowest mean value at 2.4950with standard deviation of 1.05487.

PI2 appeared to have the highest mean score 3.7520 with standard deviation of 0.85217. The lowest mean score achieved by PI5 (2.8500) with stand deviation of 1.01493

4.2 Scale Measurement

4.2.1 Reliability Test

Table 4.6: Result of Reliability Test

Variable	Cronbach's Alpha	Number of Items
Independent Variable:	0.716	5
Relative advantage	0.783	5
Price	0.880	5
Compatibility	0.758	5
Social influence		
Dependent Variable		
Purchase intention	0.757	5

Source: Developed for the research

The rule of thumb for the reliability test is that 0.7 or higher suggests good reliability and may be acceptable if between 0.6 and 0.7. Based on the results in Table 4.6, relative advantage, price, compatibility, social influence, and purchase intention recorded excellent reliability with Cronbach's Alpha of 0.716, 0.783, 0.880, 0.758 and 0.757 respectively.

4.3 Inferential Analysis

Inferential analysis is a branch of analysis that goes beyond mere description, and based on sample data seeks to generalize from the sample to the population from which the sample was drawn (Weiers, 2008). Such analysis is used to provide the generation of conclusions regarding the characteristics of the population based on the sample data. Besides that, inferential analysis also aims to examine individual variables and its relationships with other variables (Sekaran & Bougie, 2010).

4.3.1 Pearson Correlation Coefficient

Hair et al. (2007) noted that Pearson Correlation Coefficient indicates the direction, strength and significance of the bivariate relationships among all the variables that were measured on interval scale.

Table 4.7 :Pearson Correlation

Correlations

		RA_Ave	P_Ave	C_Ave	SI_Ave	PI_Ave
RA_Ave	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	400				
P_Ave	Pearson Correlation	.334**	1			
	Sig. (2-tailed)	.000				
	N	400	400			
C_Ave	Pearson Correlation	.147**	.389**	1		
	Sig. (2-tailed)	.003	.000			
	N	400	400	400		
SI_Ave	Pearson Correlation	.160**	.364**	.657**	1	
	Sig. (2-tailed)	.001	.000	.000		
	N	400	400	400	400	
PI_Ave	Pearson Correlation	.215**	.489**	.633**	.612**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	400	400	400	400	400

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

Table 4.7 shows that the correlations between independent variables which include relative advantages, price, compatibility, and social influence with dependent variable which is purchase intention of young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. Independent variables have positive linear relationship to dependent variable at significant level 0.05. All value in this probable is less than 0.9 which indicates that there is no multicollinearity problem. The correlation among independent variables is less than 0.9 which is between 0.215 and 0.633.

There is a significant relationship between relative advantage and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. This is because the p-value equal to 0.000 and less than alpha value 0.05. Moreover, the value of the correlation coefficient, which is 0.215, falls under the coefficient range of "±0.00 to ±0.20". This indicates a slightly weak relationship between relative advantages and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

There is a significant relationship between price and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. This is because the p-value equal to 0.000 and less than alpha value 0.05. Moreover, the value of the correlation coefficient, which is 0489, falls under the coefficient range of "± 0.41 to ±0.70". This indicates a moderate relationship between price and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

There is also a significant relationship between compatibility and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. This is because the p-value equal to 0.000 and less than alpha value 0.05. Moreover, the value of the correlation coefficient, which is 0633, falls under the coefficient range of "± 0.41 to ±0.70". This indicates a moderate relationship between price

and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

There is a significant relationship between social influence and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. This is because the p-value equal to 0.000 and less than alpha value 0.05. Moreover, the value of the correlation coefficient, which is 0612, falls under the coefficient range of "± 0.41 to ±0.70". This indicates a moderate relationship between social influence and purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

4.3.2 Multiple Regression Analysis

With reference to Weiers (2008), a multiple regression analysis is an analysis which involves one dependent variable and two or more independent variables. In other words, it is an analysis of association in which the effects of two or more independent variables on a single, interval-scaled dependent variable are investigated simultaneously (Zikmund et al., 2010).

Table 4.8 : Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.722[a]	.521	.516	.46552	1.789

a. Predictors: (Constant), SI_Ave, RA_Ave, P_Ave, C_Ave

b. Dependent Variable: PI_Ave

Based on the table above, it shows that the value of correlation coefficient (R value) is 0.521. Independent variables can explain 52.1% of the variation in dependent variable. However, it is still left 47.9% unexplained in this study.

Table 4.9 : ANOVA

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	92.950	4	23.237	107.229	.000^a
	Residual	85.600	395	.217		
	Total	178.550	399			

a. Predictors: (Constant), SI_Ave, RA_Ave, P_Ave, C_Ave

b. Dependent Variable: PI_Ave

Table 4.9 shows that p-value (Sig 0.000) is less than alpha value 0.05. The alternative hypothesis as the four independent variables are significantly explains the variance in consumers' level is supported by the data and will be accepted.

Table 4.10 : Coefficients

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.508	.173		2.936	.004
	RA_Ave	.041	.038	.039	1.057	.291
	P_Ave	.238	.041	.235	5.856	.000
	C_Ave	.276	.038	.341	7.211	.000
	SI_Ave	.284	.045	.297	6.340	.000

a. Dependent Variable: PI_Ave

Based on table above, (Coefficients) show that price, compatibility, and social influence is significant to predict dependent variable (purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia) this is because p-value is less than alpha value 0.05. On the other hand, the only independent variable that is not significant to predict the dependent variable is relative advantage; the p-value is equal to 0.291 which is more than alpha value 0.05.

The relationship can be denoted as the following equation from the analysis from the table above:

Purchase intention = 0.508 + 0.238(Price) + 0.276(Compatibility) + 0.284(Social   Influence) + 0.041(Relative Advantage)

According to Table 4.10, price was found to exert a significant positive influence on purchase intention which has impact toward young adults purchase intention ($t = 5.586$, $p = 0.000$, $\beta = 0.238$). When other variables are held constant, every one unit increase in Price will lead to increase in purchase intention by 0.238 units.

Analysis from Table 4.10, shows that compatibility have significant positive influence and impact on purchase intention ($t = 7.211$, $p = 0.000$, $\beta = 0.276$) as its p-value is less than 0.05. It can be explained by every one unit increase in Compatibility will lead to 0.283 units increased in purchase intention.

From the table 4.10, it also shows that social influence have significant positive influence on purchase intention which has the strongest impact ($t = 6.340$, $p = 0.000$, $\beta = 0.284$) as its p-value is less than 0.05. It can be explained by every one unit increase in Social Influence will lead to 0.297 units increased in purchase intention.

On the other side, there is insignificant influence or no impact by relative advantage on purchase intention (t = 1.057, p = 0.291, β = 0.041) as its p-value is more than 0.05.

Test of Significant

Hypothesis 1

H_0: There is no impact from social influence towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H_1: There is an impact from social influence towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

Reject H_0, if $p < 0.05$

The p-value of social influence according to the table above is 0.000 which is less than the significant level of 0.05. Then, H_0, rejected, which means social influence has an impact towards young adults' purchase intention.

Hypothesis 2

H_0: There is no impact from relative advantage towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H_1: There is an impact from relative advantage towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

Reject H_0, if $p < 0.05$

For relative advantage, the p-value is more than 0.05 which is 0.291. Thus, H_0 is not rejected. It indicates that there is no impact between relative advantages towards young adults' purchase intention.

Hypothesis 3

H$_0$: There is no impact from compatibility towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H$_1$: There is an impact from compatibility towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

Reject H$_0$, if $p < 0.05$

The p-value of compatibility according to the table above is 0.000 which is less than the significant level of 0.05. Then, H$_0$, rejected, which means compatibility has an impact towards young adults' purchase intention.

Hypothesis 4

H$_0$: There is no impact from price towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H$_1$: There is an impact from price towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

Reject H$_0$, if $p < 0.05$

The p-value of price according to the table above is 0.000 which is less than the significant level of 0.05. Then, H$_0$, rejected, which means price, has an impact towards young adults' purchase intention.

Hypothesis 5

H$_0$: No factors (Social Influence, Relative Advantage, Compatibility and Price) have significant influence on purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

H$_1$: At least one factor (Social Influence, Relative Advantage, Compatibility and Price) have the most significant influence on purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

Reject H$_0$, if p<0.05

There are 3 factors that have influence on purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus. There are social influence, compatibility and price. P-value of the 3 factors is less then significant level 0.05. According to table 4.10, compatibility has the highest score in beta. Thus, compatibility has the most significant influence on purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

4.4 Conclusion

In summary, this chapter serves to present the results and findings obtained from data gathering for this study. Furthermore, inferential analyses are also conducted and are demonstrated in this chapter to answer the research questions, as well as to determine the significance of the hypotheses for this research. The subsequent chapter contains discussion on major findings as well as a conclusion to this research.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

In chapter 5, it provides the overall of conclusion and discussion of the research. It summarized the discussion of major finding from chapter 4, highlights the implications of the study, stated the limitations of the study, provide recommendations for the future research, and provide conclusion of the entire research.

5.1 Summary of Statistical Analyses

5.1.1 Summary of Descriptive Analysis

5.1.1.1 Demographic Profile of the Respondents

Based on the descriptive analysis in chapter 4, out of the 400 respondents there are 232 (58%) male, and the remaining 168 (42%) are female. From the data collected, most of the respondents are Chinese which constitute 384 out of 400 respondents, in another word means 96%. It is followed by Indian and others, both also 2% and 8 respondents respectively.

Majority of respondents are come from faculty of business and finance, which made up 64% or 256 out of 400 respondents. 88 (22%) respondents are from faculty of arts and social science. 24 (6%) respondents are from

faculty of information and communication technology. There are only 16 (4%) respondents come from faculty of engineering and green technology and faculty of science respectively.

For the monthly personal money spending level, researchers found that majority of respondents have fall into the category of RM500 or below, which consists of 176 (44%) respondents. The second larger category will be in between RM501 and RM800, which has 160 (40%) respondents. In between RM801 and RM1000 has 56 (14%) respondents, and lastly is in between RM1001 and RM1500 only has 8 respondents which is 2%.

5.1.1.2 Summary of Central Tendencies Measurement of Constructs

RA1 has the highest mean value at 4.2250 with standard deviation of 0.89799 while RA4 shows the lowest mean value at 3.4200 with standard deviation of 0.99048. P2 recorded the highest mean score 4.1200 with standard deviation of 0.94224, while the lowest mean score (3.5150) is achieved by P4 with standard deviation of 0.91754. C1 recorded the highest mean value (3.3700) with standard deviation of 0.93557, while C3 has the lowest mean value (2.9700) and appear to have standard deviation of 1.03284. SI3 has the highest mean value at 3.3025 with standard deviation of 0.93175 while SI5 shows the lowest mean value at 2.4950 with standard deviation of 1.05487. PI2 has the highest mean score (3.7520) and PI5 has the lowest mean score (2.8500), the standard deviations for both of them are 0.85217 and 1.01493respectively.

5.1.2 Summary of Scale Measurement

For the reliability test, questions for independent variables (relative advantage, price, compatibility and social influence) and dependent variable (purchase intention) are reliable since each test indicates its value

to be more than 0.7. Thus, all of the variables (relative advantage, price, compatibility, social influence and purchase intention) are reliable.

5.1.3 Summary of Inferential Analysis

5.1.3.1 Pearson Correlations Test

All the four independent variables are free from multicollinearity problem as all correlation values are less than 0.9. Pearson correlation test also used to measure the relationship between each individual independent variables and dependent variable. All of these four independent variables establish significant relationship with purchase intention as their p-values are less than 0.05. However, price, compatibility and social influence establish positive relationship whereas relative advantage has negative relationship toward purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

5.1.3.2 Multiple Linear Regressions (MLR)

According to the output of MLR, the $R^2 = 0.521$ implies that 52.1% of the variation in the purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia can be explained by four independent variables in this recent research. P (Price), C (Compatibility), and SI (Social Influence) established significant positive relationship with purchase intention, while RA (Relative Advantage) has no relationship toward purchase intention. Meanwhile, MLR also concluded that SI has the strongest influence towards purchase intention. The estimated regression equation is as follow:

Purchase intention $= 0.509 + 0.297SI + 0.283C + 0.262P - 0.009RA$

5.2 Discussions of Major Findings

While the previous section of this chapter focuses more onto the summary description of the entire descriptive and inferential analyses, this section is more onto the discussion on major findings in order to validate the research objectives and hypotheses.

Table 5.1: Summary of Statistical Analysis

Hypothesis	Significant	Conclusion
H_1: There is an impact from social influence towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.	0.000	Supported
H_2: There is an impact from relative advantage towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.	0.291	Not Supported
H_3: There is an impact from compatibility towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.	0.000	Supported
H_4: There is an impact from price towards purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.	0.000	Supported

Source: Developed for the research

5.2.1 Relationship between social influence and young adults' purchase intention

H_1 indicates that social influence has significant influences on young adults' purchase intention. Result shows P-value is 0.000 and β-value is 0.284 which expressed that H_1 is supported. Few past studies also support this hypothesis. The notion that humans are influenced in their beliefs, preferences, and behaviors by the beliefs, preferences, and behaviors of others has become nearly axiomatic across the social sciences (Cialdini & Goldstein, 2004). Thus, social influence is positively related to young adults' purchase intention, H_1 is fully supported.

5.2.2 Relationship between relative advantage and young adults' purchase intention

H_2 indicates that relative advantage has no significant influences towards young adults' purchase intention. Result shows P-value is 0.291 and β-value is 0.041 which expressed that H_2 is not supported. There was no impact between relative advantage to young adult's purchase intention which is inconsistent with the study by Ho and Wu (2011), Shimp (2008), Kurtz, McKenzie, and Snow (2009), and Mohr, Sengupta, & Slater, which state that an innovation that offers a greater advantage is believed to have greater acceptability, higher diffusion speed, the current innovation literature has established that relative advantage is one of the best and most consistent predictors of innovation adoption. Eventually, the research is done in United States of America most of the time as western and eastern culture are different, the research may work in western countries but not effectively success in eastern countries such as Malaysia. Thus, relative advantage is negatively related to young adults' purchase intention, H_2 is rejected.

5.2.3 Relationship between compatibility and young adults' purchase intention

H_3 indicates that compatibility has the most significant influences compare to other factors on young adults' purchase intention. Result shows P-value is 0.000 and β-value is 0.276 which expressed that H_3 is supported. Rogers (1976) supported that compatibility is also an important issue in a market with demand externalities and the purchase intention of customers. The reason compatibility has the most significant influence on young adult's purchase intention is because smartphone is compatible to young adults lifestyle. For example, youngsters love to surf internet whenever they are, smartphone is able to satisfy their needs. Furthermore, nowadays youngsters are very active in social networking website such as Facebook and Twitter. With the help of smartphone, young adults can update their Facebook status, review of the most updated news from their friends and family in Facebook and etc. Thus, compatibility is positively related to young adults' purchase intention, H_3 is fully supported.

5.2.4 Relationship between price and young adults' purchase intention

H_4 indicates that price has significant influence on young adults' purchase intention. Result shows P-value is 0.000 and β-value is 0.238 which expressed that H_4 is supported. There are researchers that support this hypothesis. Dodds W. B. (1991) state that a set of acceptable price range is established when consumers purchase products. There is reduction on consumers purchase intention when the actual price on products is higher than acceptable price range and it is vice versa. If the price is lower than the acceptable price range, consumers may lack of confidence on products (Peter, 1969). According to the supporting research by researchers, price is positively related to young adults' purchase intention, H_{34} is fully supported.

5.3 Implication of the Study

The finding of this study helps in understanding the factors that can affect purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. Through this understanding of study, it is applicable to market the young adults and improving the understanding of the youth adult purchase intention towards smartphone.

5.3.1 Managerial Implications

Based on the information gathered from the study on factors affecting purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia, the researchers have established several implications that might useful in assisting smartphone companies to increase the demand of smartphone among young adults target market. Young adults nowadays are having more option in choosing their preferable smartphone brands; as a result, it is necessity for these companies to make further improvements and used various marketing strategies to boost the sales of smartphone.

According to the research done, compatibility has the highest significant impact among others independent variables in influencing the purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. Thus, smartphone companies are suggested to increase the young adults' purchase intention to buy by applying practical implications. For compatibility, smartphone companies can invent the smartphone that suit best to the lifestyle of young adults such as by made improvement in the smartphone design. Young adults normally are used to carry cool gadget to show to their friends. Besides that, smartphone companies can expand their smartphone function such as by upgrading the processor of smartphone so that it can perform faster and

better which suit to the lifestyle of young adults. Furthermore, the companies can increased the battery life of their new invent smartphone because young adults tend to used their smartphone in whole-day life.

Based on the research done, perception of price has the significantly impact on the purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. Therefore, smartphone companies can focus on the price of smartphone in targeting the young adults market. Smartphone companies can increase the price for high-end smartphone because young adults tend to perceive that high price brings to more high quality products, vice versa.

Based on the research done, social influence has the significantly impact on the purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia. Young adults tend to have more socialized than others. More socializing tends to create positive and negative word of mouth among friends towards particular company. Thus, smartphone companies suggested offering creative and innovative advertisement target on young adult. For example, attractive tools such as animations and colorful designs can be used on their advertisement. In addition, an effective follow up services can be provided so that it can meet or act beyond young adults' expectation to create positive word of mouth towards the companies.

5.4 Limitation of the Study

There are several limitations in this research. The result may not be generalized for the managerial because the samples only collect on one area of the Malaysia, which is in Universiti Tunku Abdul Rahman, Perak Campus. It cannot represent whole population in Malaysia. Besides that, the statistic of demographic elements shows that Universiti Tunku Abdul Rahman contain highest percentage of

Chinese student compare to other races. This may cause that people in difference demographic will have difference thinking about the consumption of Smartphone.

Secondly, there are only four independent variables in this research and there might have other factors which did not take into account. Those factors that were not included in this research might be the influential predictors of purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

Next, some of the main journal and referrals journal which adopted overseas may not suitable for Malaysia. The variables that used to tested in overseas may not suitable for Malaysia. Furthermore, researcher cannot fully utilize the journals from portals because it is necessary to pay and in order to excess to the journals.

Lastly, another limitation for the research will be the only used of questionnaire survey. Minority of the respondents might not understand the questions and therefore they may randomly select an answer to complete the questionnaire. Moreover, the participants could not spend much time and effort in contributing the survey. Questionnaire survey is also very judgmental and different people would have different views based on their understandings. All of these could reduce the accuracy and preciseness of the results.

5.5 Recommendations for Future Research

There are few recommendations for the researchers in the future. First of all, it is recommended to done the research in whole country if time is allowed because it is more accurate instead of just pick one state to do it, such as by including all the state in whole Malaysia. It is advisable to include all the states in the country when conducting the research because it tends to reduce the people in difference demographic will have difference thinking about the consumption of smartphone.

Besides that, future researcher can further their study by incorporate other independent variables that can determine the factors affecting consumer purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus. However, researchers have to be more caution when choosing the independent variables as only the right variable can improved the value of R^2.

Lastly, the researchers are recommended to use interview when conducting the survey. The usage of interview will reduce the limitation by using questionnaire where people can directly understand the question that asked by the researchers rather than interpreted the questionnaire questions. This will reduce the misunderstanding of the people when interpreting the questions in the questionnaire.

5.6 Conclusion

As a conclusion, this research is basically study about the factors that affecting the purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus. The demand of smartphone is rapidly increase nowadays due to the current technology trend and evolution of innovation of mobile phone. Smartphone become a common need to most people nowadays due to the ability of smartphone can do and the advantages of smartphone compare to other technology devices. The increasing demand of smartphone should have some interesting factors that affect consumer to purchase it. In this research, four important factors are chosen to run the whole research.

The research is to investigate the factors (social influence, relative advantage, compatibility and price) which affecting purchases intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus. Total number of 400 questionnaires was being distributed and the data collected was processed and analyzed using SPSS 16.0 in which outcome generated included both descriptive and inferential analysis. After the analysis, social influence, compatibility and

price have significant positive relationship with young adults' purchase intention. Meanwhile, relative advantage has no relationship with the dependent variable.

In conclusion, the research had met its main objectives by validating that social influence, price and compatibility were significant influence the purchase intention while only relative advantage are having less impact to the dependent variable. After this research, smartphone companies could stress on those factors to attract more young customers and keep developing the smartphone industry in Malaysia. Future researchers may fully use the knowledge in this research to make amendment or for reference purpose. Thus, this research gives a clearer picture of exploring the factors that affecting the purchase intention of smartphone among young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

REFERENCES

Abrams, D. (1992). *Processes of Social Identification.* (M. B. Glynis, Ed.) London: Surrey University Press.

Agarwal, S., & Teas, R. K. (2002). Cross-national applicability of a perceived quality model. *Journal of Product & Brand Management , 11(4)*, 213-236.

Alexander, A. (2011, October 31). *AnsonAlex.com.* Retrieved April 8, 2012, from How Reliant Are College Students on Smartphones? [Infographic]: http://ansonalex.com/technology/how-reliant-are-college-students-on-smartphones-infographic/

Anderson, D. R., Sweeney, D. J., & Williams, T. A. (2008). *Statistics for Business and Economics.* Cengage Learning.

Anderson, S. (2011). *Rise of Smartphone*. Retrieved March 20, 2012, from Smartphones' details: http://www.switzer.com.au/technology/feature/rise-of-thesmartphone

Anson, A. (2012). *Smartphone usage statistic 2012*. Retrieved July 8, 2012, from AnsonAlex Technology: http://ansonalex.com/infographics/smartphone-usage-statistics-2012-infographic/

Apfelbaum, E. P., Sommers, S. R., & Norton, M. I. (2008). Seeing race and seeming racist? Evaluating strategic colorblindness in social interaction. *Journal of Personality and Social Psychology, 95* , 918-932.

Armstrong, J. S., Morwitz, V. G., & Kumar, V. (2000). Sales forecasts for existing consumer products and services: Do purchase intentions contribute to accuracy. *International Journal of Forecasting , 16(3)*, 383-397.

Asch, S. E. (1951). *Effects of group pressure upon the modification and distortion of judgment. In H. Guetzkow (Ed.), Groups, leadership and men.* Pittsburgh: PA: Carnegie Press.

Assael, H. (1992). *Consumer Behaviour & Marketing Action. 4th edition.* Boston: PWS-KENT Publishing Company.

Batra, & Sinha. (2000). Consumer-level factors moderating the success of private label brands. *Journal of retailing , 76* (2), 175-191.

Bearden, W., Netemeyer, R., & Teel, J. (1989). Measurement of consumer susceptibility to interpersonal influence. *Journal of consumer research, 15(4)* , 473-481.

Berger, J., & Heath, C. (2007). Where consumers diverge from others: Identity-signaling and product domains. *Journal of Consumer Research, 34* , 121-134.

Bickart, B., & Schindler, R. (2001). Internet forums as influential sources of consumer . *Journal of Interactive Marketing, 15(3)* , 31-40.

Black, K. (2011). *Business Statistics: For Contemporary Decision Making* . John Wiley & Sons.

Blackwell, R. D., Miniard, P. W., & Engel, J. F. (2001). *Consumer behavior 9th.* Mason, Ohio: South-Western.

Bonnie D, B., Teresa A, S., Yingjiao, X., & Raul, P. (2007). Theory of Reasoned
Action Purchase Intention of Young Consumers. *Clothing and Textiles
Research Journal , 25* (3), 244-257.

Boone, L. E., & Kurtz, D. L. *Contemporary Marketing.* 2011: Cengage Learning.

Bradley, N. (2007). *Marketing Research: Tools & Techniques.* Oxford University
Press.

Brodeur, C. W., Israel, G. D., & Craig, D. D. (2010). *Using Secondary Data to
Build Strong Extension Programs.* Retrieved June 15, 2012, from
http://pdec.ifas.ufl.edu/lrp/pdfs/EDIS_Using%20Secondary%20Data.pdf

Brown, I., Cajee, Z., Davies, D., & Stroebel , S. (2003). Cell phone banking:
Predictors of adoption in South Africa - An exploratory study. *International
Journal of Information Management , 23*, 381-394.

Brummans, A. H. (2006). A Study On Adoption and Diffusion of EDI in the
Dutch Insurance Industry. In *Adoption And Diffusion Of EDI In Multilateral
Networks Of Organizations.* Rozenberg Publishers.

Bryman, A. (1984). The debate about quantitative and qualitative research: A
question of method or epistemology? *The British Journal of Sociology , 35*
(1), 75-92.

Camerer, C. F. (2003). Behavioral game theory. Princeton. *NJ: Princeton
University Press .*

Chan, K. W., & Li, S. Y. (2009). Understanding consumer-to-consumer
interactions in virtual communities: the salience of reciprocity. *Journal of
Business research, forthcoming ,* 1-8.

Ching-Fu, C., & Yu-Ying, C. (2008). Airline brand equity, brand preference, and purchase intentions. *Journal of Air Transport Management , 14*, 40–42.

Chiu, C.-M., Hsu, M.-H., & Wang, E. (2006). Understanding knowledge sharing in virtual communities: an integration of social capital and social cognitive theories. *Decision support, 42* , 1872-1888.

Churchill, G. A., & Iacobucci, D. (2009). *Marketing Research: Methodological Foundations.* Cengage Learning.

Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. *Annual Review of Psychology, 55* , 591–621.

Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). *Journal of Personality and Social Psychology, 58* , 1015-1026.

Cnossen, & Christine. (1997). *School of Public Administration and Law, the Robert Gordon University*. Retrieved June 14, 2012, from Secondary Reserach: Learning Paper 7: jura2.eee.rgu.ac.uk/dsk5/research/mater

CourseSmart. (2011, June 1). *PR Newswire*. Retrieved June 1, 2012, from Digital Dependence of Today's College Students Revealed in New Study from CourseSmart: http://www.prnewswire.com/news-releases/digital-dependence-of-todays-college-students-revealed-in-new-study-from-coursesmart-122935548.html

Craig, K. D., & Prkachin, K. M. (1978). Social modeling influences on sensory decision theory and psychological indexes of pain. *Journal of Personality and Social, 36* , 805-813.

De Valck, K., Van Bruggen, G. H., & Wierenga, B. (2009). Virtual communities: a marketing perspective. *Decision support systems, 47* , 185-203.

Denise E., A. (2005). People, places, and questions: An investigation of the everyday life information-seeking behaviors of urban young adults. 27(2), 141-163.

Deutsch, M., & Gerard, H. (1955). A study of normative and informational social influences upon individual judgment. *The journal of abnormal and social psychology, 51(3)* , 629-636.

Dick, A., Jain, A., & Richardson, P. (1995). Correlates of Store Brand Proneness:Some Empirical Observations. *The Journal of product & brand management , 4* (4), 15–22.

Dodds, W. B. (1991). In Search of Value: How Price and Store Name Information Influence Buyers Product Perceptions. *The journal of services marketing , 5* (3), 27-36.

Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research* , 307-319.

Dora, V. e. (2012). Smartphone Affordance: Achieving Better Business Through Innovation. *Journal of the Knowledge Econonmy* .

E.Stevens, R. (2006). *The Marketing Research Guide.* Routledge.

Edison, R. (2010, October 1). *Marketing Chart*. Retrieved April 8, 2012, from Young   Adults   Use   Facebook,   Mobile   Tech:

http://www.marketingcharts.com/direct/young-adults-use-facebook-mobile-
tech-14413/

Erevelles, S. (1993). The price-warranty contract and product attitudes. *Journal of
Business Research , 27(2)*, 171-181.

Erickson, G. M., & Johansson, J. K. (1985). The Role of Price in Multi-Attribute
Product Evaluations. *Journal of consumer research , 12* (2), 195-200.

Farrell, J., & Saloner, M. (1985). Standardization, Compatibility and Innovation.
Rand J. Economics , 1, 70-83.

Fishbein, M. (1967). Attitude and the prediction of behavior. *Readings in attitude
theory and measurement* , 477-492.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An
introduction to theory and research.* Reading: MA.: Addison-Wesley.

Fliegel, Frederick, C., & Joseph, E. K. (1966). Attributes of Innovations as Factors
in Diffusion. *American Journal of Sociology , 72*, 235 -248.

Gatignon, H., & Robertson, T. S. (1985). A propositional inventory for new
diffusion research. *Journal of Consumer Rsearch , 11*, 849-866.

Gatignon, H., & Robertson, T. S. (1991). *Innovation Decision Process.* New
Jersey: Prentice Hall.

Gerber, A. S., Green, D. P., & Larimer, C. W. (2008). . Social pressure and voter turnout: Evidence from a large-scale field experiment. *American Political Science Review, 102* , 33-48.

Godes, D., & Mayzlin, D. (2004). Using online conversations to study word-of-mouth. *Institute for Operations Research and the Management Sciences* , 545-560.

Gourville, J. T. (2006). Eager Sellers and Stony Buyers: Understanding the Psychology of New-Product Adoption. *Harvard Business Review , 84* (6).

Grewal, D., Krishanan, R., Baker, J., & Borin, N. (1998). The Effect of Store Name, Brand Name and Price Discounts on Consumers' Evaluations and Purchase Intentions. *Journal of Retailing , 74* (3), 331-352.

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

Han, C. M. (1990). Testing the role of country image in consumer choice behaviour. *European Journal of Marketing , 24(6)*, 24-40.

He, Q., Duan, Y., Fu, Z., & Li , D. (2006). An Innovation Adoption Study of Online E-Payment in Chinese Companies. *Journal of Electronic Commerce inOrganizations , 4*, 48-64.

Higgins, M. C. (2001). Follow the leader?: The effects of social influence on employer choice. *Group & Organization Management, 26* , 255-282.

Ho, C. H., & Wu, W. (2011). Role of Innovativeness of Consumer In Relationship Between Perceived Attributes of New Products And Intention to Adopt. *International journal of electronic business management , 9*, 258-266.

Hogg, M. A., & Vaughan, G. M. (2002). *Social Psychology* (3rd ed.). London: Prentice Hall.

Holak, S. L., & Lehmann, D. R. (1990). Purchase Intentions and the Dimensions of Innovation: An Exploratory Model. *Product innovation management* , 59-73.

Hong, H., Kubik, J. D., & Stein, J. C. (2004). Social interaction and stock market participation. *The Journal of Finance, 59* , 137-163.

Hyuk Jun, C., & Margaret A, M. (2008). Consumers' Reliance on Product Information and Recommendations Found in UGC. *Journal of Interactive Advertising , 8* , 2.

Isen, A. M. (2011). An Influence of Positive Affect on Decision Making in Complex Situations: Theoretical Issues With Practical Implications. *Journal of Consumer Pyschology* , 11(2), 75-85.

J.Mohr, J., Sengupta, S., & F.Slater, S. Factors Affecting Adoption of Innovation. In *Marketing of High- Technology Products and Innovations* (p. 237). Jakki Mohr.

Jacob, & Olson. (1977). *Consumer Response to Price: An Attitudinal, Information Processing Perspective* (Vols. 73-86). Chicago: American Marketing Association.

Jane, E. S., & Peter, J. B. (2000). Identity Theory and Social Identity Theory. *Social Psychology Quarterly , 63* (3), 224-237.

Jee Han, Y., Joseph, C. N., & Xavier, D. (2010). Signaling Status with Luxury
Goods: The Role of Brand Promonence. *Journal of Marketing , 74*, 4.

Joep W, C. A., Ruud T, F., & Tammo H, A. B. (2011). Generalizations on
consumer innovation adoption: A meta-analysis on drivers of intention and
behavior. *International Journal of Research in Marketing , 28(2)*, 134-144.

Juha, M. (2008). Customers' purchase intentions as a reflection of price perception.
Journal of Product & Brand Management , 17 (3), 188 – 196.

Katz, J. E. (2008). *Assessing new cell phone text and video services.* USA:
Elsevier Ltd.

Katz, M. L., & Shapiro, C. (1986). Network Externalities, Competition, and
Compatibility. *The American Economic Review , 3*, 424-440.

Key, & P., J. (1997). *Questinaire and interview as data-gathering tools*. Retrieved
June 14, 2012, from Research Design in Occupational Education.

Kim, E. Y., & Kim, Y. K. (2004). Predicting online purchase intentions for
clothing products. *European Journal of Marketing , 38(7)*, 883-897.

Kothari, C. (2004). *Research methodology – Methods and techniques (2nd
edition).* Delphi: New Age International publishers.

Kozinets, R. (1999). E-tribalized marketing?: the strategic implications of virtual
communities of consumption. *European Management Journal, 17(3)* , 252-
264.

L.Kurtz, D., H.F.MacKenzie, & Snow, K. (2009). Rate of Adoption Determinants, Relative Advantage. In *Contemporary Marketing.* Cengage Learning.

Lange, F. A. (1925). *The History of Materialism.* New York: Harcourt, Brace, & Co.

Lee, S. H., Cotte, J., & Noseworthy, T. J. (2009). The role of network centrality in the flow of consumer influence. *Journal of Consumer Psychology, forthcoming* .

Lefkoff-Hagius, & Mason. (1993). Characteristic, Beneficial, and Image Attributes in Consumer Judgments of Similarity and Preference. *Journal of consumer research , 20* (1), 100.

Lewis, J. W. (2012). Diffusion of Innovation. In *The Business of Martyrdom: A History of Suicide Bombing.* Naval Institute Press.

Lin, H.-F. (2008). Determinants of successful virtual communities: contributions from system. *Information & Management, 45(8)* , 522-527.

Ling, C. (2011). Factors Influencing Changsha Teenagers' Purchase Intention Towards. *Assumption University Press* (p. 37). Bangkok: Assumption University.

Malhotra, N. K. (1996). *Marketing Research: An Applied Orientation.* Prentice Hall.

May, & Hearn. (2005). The Mobile Phone as Media. *International journal of cultural studies* , 195-211.

McDaniel, C. D., & Gates, R. H. (1998). *Marketing Research Essentials.* Taylor
    & Francis.

Min, M., Chow, Hong, L., Chen, Ai, J., Yeow, et al. (2012). Conceptual Paper:
    Factors Affecting the Demand of Smartphon. *International Journal on
    Social Science Economic & Art , 2* (2), 44-49.

Mitra, A. (1995). The Moderating Role of Motivation and. *Price Cue Utilization
    in Product , 33* (3), 187-195.

Monk, A., Hassenzahl, M., Blythe, M., & Reed, D. (2002). Funology:
    designingenjoyment. *roceedings of Conference on Extended Abstracts on
    HumanFactors in Computer Systems* , 924.

Monroe, & Krishnan. (1985). *The effect of price on subjective product evaluations*
    (Vols. 209-32). Lexington: Lexington Books.

Morwitz V, G., & Schmittlein D, C. (1992). Using segmentation to improve sales
    forecasts based on purchase intent. *Journal of Marketing Research , 29* (4),
    391-405.

Morwitz V, G., Steckel J, H., & Gupta, A. (2007). When do purchase intentions
    predict sales. *International Journal of Forecasting , 23* (3), 347-364.

Moser, P. K., & J.D, T. (1995). *Contemporary Materialism: A Reader.* New York:
    Routledge.

Mourali, M., Laroche, M., & Pons, F. (2005). Individualistic orientation and
    consumer susceptibility to interpersonal influence. *Journal of Services
    Marketing* , 164-173.

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review, 23(2)* , 242-266.

Nargundkar. (2008). *Marketing Research : Text And Cases.* Tata McGraw-Hill Education.

Nihal, T. (2011). Viral Marketing Techniques Within Online Social Network. *Journal of Yasar University* , 24(6) 4112-4129.

Novack, G. (1979). *The Origins of Materialism.* New York: Pathfinder Press.

Osman, A., Sabudin, M., Osman, A., & Shiang-Yen. (2011). Consumer Behaviors toward Usage of Smartphone in Malaysia. *International Conference on Software and Computer Applications , 9*, 158-164.

Pecotich, A., Pressley, M., & Roth, D. (1996). The impact of ethnocentrism on the origin effect in the service sector. *Journal of Retailing and Consumer Services , 12(4)*, 213-224.

Peter, C. (1969). *The Begrudging Index and the Subjective Value of Money,' in Pricing.* London: London, Staples Press, Ltd.

Redman, L., & Mory, A. (1923). *The Romance of Research.*

Reingen, P. H. (1982). Test of a list procedure for inducing compliance with requests. *Journal of Consumer Research, 5* , 96-102.

research design definition. (1998, 12 12). Retrieved 07 03, 2012, from mondofacto: http://www.mondofacto.com/facts/dictionary?research+design

Richards, L. (2010, October 18). *The Value of Exploratory Research*. Retrieved June 14, 2012, from NATURAL PRODUCTS INSIDER Website: http://www.nutraceuticalmedicalresearch.com/news/pdf/The-Value-of-Exploratory-Research-FINAL-as-of-Oct-13-10-with-ABSTRACT.pdf

Richardson, S., P., Dick, A. S., & Jain., A. K. (1996). Household Store Brand Proneness: A Framework. *Journal of retailing , 72* (2), 159-185.

Roach, G. (2009). Consumer Perceptions Of Mobile Phone Marketing: A Direct Marketing Innovation. *Direct marketing: an international journal , 3* (2), 124 - 138.

Rodoula, T. (2005). Perceived Quality Levels and their Relation to Involvement, Satisfaction, and Purchase Intentions. *Marketing Bulletin , 16*, Research Note 4.

Rogers, E. (1995). *Diffusion of innovations (4th edition).* New York: The Free Press.

Rogers, E. M. (1976). New Product Adoption and Diffusion . *Journal of Consumer Research , 2*, 192-208.

Sanfey, A. G. (2007). Social decision-making: Insights from game theory and neuroscience. *Science, 318* , 598-602.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). Essex: Pearson Education Limited.

Schiffman, L. G., & Kanuk, L. L. (2000). *Consumer Behavior (7th ed.).* Wisconsin: Prentice Hall.

Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach* (5 ed.). New York: John Wiley & Sons, Inc.

Sewall, M. A. (1978). Market segmentation based on consumer ratings of proposed product designs. *Journal of Marketing Research , 15(4)*, 557-564.

Shim, S., & Drake, M. F. (1990). Consumer intention to purchase apparel by mail order: beliefs, attitude, and decision process variables. *Clothing and Textiles Research Journal , 9(1)*, 18-26.

Shimp, T. A. (2008). Brand Characteristics That Facilitate Adoption. In *Advertising, Promotion, and Other Aspects of Integrated Marketing Communications.* Cengage Learning.

Shostack, G. L. (1977). Breaking free from product marketing. *The Journal of Marketing , 41(2)*, 73-80.

Silk, A. J., & Urban, G. L. (1978). Pre-test-market evaluation of new packaged goods: A model and measurement methodology. *Journal of Marketing Research , 15(2)*, 171-191.

Sinhaa, I., & Batrab, R. (1999). The Effect of Consumer Price Consciousness on Private Label Purchase. *International Journal of Research in Marketing , 16* (3), 237–251.

Smartphone user around the world, statistic and facts. (2012, 01 02). Retrieved July 8, 2012, from go-gulf: http://www.go-gulf.com/blog/smartphone

Smith, S. M., & Albaum, G. S. (2005). *Fundamentals of Marketing Research.* Sage.

Sorenson, H.T., Sabroe, S., & Olsen, J. (1996). A framework for evaluation of secondary data sources for epidemiological research. *International Journal of Epidemiology , 25* (2), 435-442.

Steiner, R. L. (2004). The Nature and Benefits of National Brand/Private Label Competition. *Review of Industrial Organization , 24*, 105.

Subramanian, S. (2009). Products to Technology and Market Life Cycles : A Case Study of Smartphones. *Journal of Technology , 1* (1), 1-114.

Sudhir, K., & Talukdar, D. (2004). Does Store Brand Patronage Improve Store Patronage? *Review of industrial organization , 24* (2), 143-160.

Swani, K., & Yoo, B. (2010). Interactions between and price deal. *Journal of Product& Brand Management* , 143 - 152.

Swindells, J. (2004). *Blurtit*. Retrieved July 10, 2012, from What Are Some Advantages And Disadvantages Of Descriptive Research?: http://www.blurtit.com/q950778.html

Sypher, B. D. (1997). Interorganizational Diffusion. In *Case Studies in Organizational Communication 2: Perspectives on Contemporary Work Life* (p. 403). Guilford Press.

Tidd, J. (2010). Factor Influecing Adoption, Relative Advantages. In *Gaining Momentum.* World Scientitic.

Tim, K. (2002). *The High Price of Materialism.* Cambridge: The MIT Press.

Tom, R., & Kristin, W. M. (2005). Sex and Magazine Promotion. *Journal of Promotion Management , 11* (2-3), 131-141 .

Tseng, F. M., & Lo, H. Y. (2011). Antecedents of consumers' intentions to upgrade their mobile phones. . *Telecommunications Policy , 35*, 74-86.

Turner, J. C. (1982). *Towards a cognitive redefinition of the social group.* Cambridge: Cambridge University Press.

Vitzthum, R. C. (1995). *Materialism: An Affirmative History and Definition.* New York: Prometheus Books.

Walczuch, R. (2004). Psychological antecedents of institution-based consumer trust in e-retailing. 42(1), 159-177.

Walter, E. (1952). *The Advanced Learner's Dictionary of Current English, Oxford* (Vol. 1069). Oxford: Oxford University Press.

Warshaw, P. R., & Davis, F. D. (1985). Disentangling behavioral intentions and behavioral expectations. *Journal of Experimental Social Psychology , 21*, 213–228.

Weiers, R. M. (2008). *Introduction to business statistics* (6 ed.). Mason, USA: Thomson South-Western.

Whiten, A., Horner, V., & de Waal, F. B. (2005). Conformity to cultural norms of tool use in chimpanzees. *Nature, 43(7)* , 737–740.

William G. Zikmund, B. J. (2009). *Essentials of Marketing Research.* Cengage Learning.

Wrenn, B., Stevens, R. E., & Loudon, D. L. (2006). *Marketing Research: Text And Cases.* Routledge.

Xie, J. H., & Sirbu, M. (1995). Price Competition. *Management Science , 41*, 141-142.

Yang, K. C. (2005). Exploring factors affecting the adoption of mobile commerce in Singapore. *Telematics and Informatics , 22* (3), 257–277.

Yiu, C. S., Grant, K., & Edgar, D. (2007). Factors Affecting The Adoption of Internet Banking in HongKong—Implications for the Banking Sector. *International Journal of Information Management , 27* (5), 336–351.

Yue, G., & Stuart J, B. (2011). Explaining purchasing behavior within World of Warcraft. *Journal of Computer Information Systems , 52* (3), 18-30.

Yusuf, Z. Ö., & Abdullah, K. (2003). Research Note: A Need or a Status Symbol?: Use of Cellular Telephones in Turkey. *European Journal of Communication , 18* (2), 241-254.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence. *Journal of Marketing , 52*, 2-22.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business research methods* (8 ed.). New York: South-Western Cengage Learning.

APPENDICES

Appendix A: **Summary of Past Empirical Studies**

Study	Country	Data	Major Findings
(Isen, 2011)	United States	Questionnaire	Positive affect enhances problem solving and decision making, leading to cognitive processing that is not only flexible, innovative, and creative, but also thorough and efficient.
(Denise E., 2005)	Malaysia	Questionnaire	Friends and family have a positive relationship towards confidence to adopt smartphone.
(Nihal, 2011)	Turkey	Questionnaire	Information shared from friends and family has a positive relationship to the consumers' confidence to adopt smartphone.
(Walczuch, 2004)	Netherlands	Questionnaire	Social influence has significant influence on consumers' trust towards the smartphone.
(Dora, 2012)	United States	Questionnaire	Friends and family have a positively influences the consumer's intention to purchase smartphone.
(Holak& Lehmann, 1990; Yang, 2005)	New York	Questionnaire	People needs can be fits with smartphone.
(Brown I. , Cajee, Davies, & Stroebel , 2003)	New York	Questionnaire	Working style and lifestyle can be added extra value with having a smartphone.

(Monk, Hassenzahl, Blythe, & Reed, 2002)	Germany	Questionnaire	Smartphone to design and fit human habit
(He, Duan, Fu, & Li , 2006)	Taiwan	Questionnaire	Smartphone is able to do more things compare to basic phone
(He, Duan, Fu, & Li , 2006)	Taiwan	Questionnaire	Smartphone is able to fulfill human want and needs
(Ling, 2011)	Singapore	Questionnaire	Expression of purchase intention has significant influence on purchase behavior
(Tom & Kristin, 2005)	United States	Questionnaire	Searching for product information has significant impact on purchase intention
(Hyuk Jun & Margaret A, 2008)	United States	Questionnaire	The topic mostly talk in social environment has significant effect on purchase behavior
(Rodoula, 2005)	Greek	Questionnaire	Perceived beneficial of certain product has significant effect on customer product adoption
(Ching-Fu & Yu-Ying, 2008)	Taiwan	Questionnaire	Willingness to recommend other has significant effect on personal interest on particular product
(Sinhaa & Batrab, 1999)	United States	Questionnaire	Price has most significant impact on intention of purchasing smartphone.
(Grewal, Krishanan, Baker, & Borin, 1998)	United States	Questionnaire	Prices have positive relationship towards the adoption of electronic products.
(Richardson, S., Dick, & Jain., 1996)	United States	Questionnaire	Price and quality has positive relationship in influencing the purchase intention of consumer.
(Steiner, 2004)	United States	Questionnaire	High price determine good quality of product when purchasing.

(Brown I. , Cajee, Davies, & Stroebel , 2003)	South Africa	Questionnaire	The perceived relative advantages of using cell phone banking have a positive relationship towards adoption of cell phone
(Holak & Lehmann, 1990)	United State	Questionnaire	Relative advantages has significant influences on perceived risk combine to form the intention to buy an innovation
(Yang, 2005)	Singapore	Questionnaire	Perceived usefulness, perceived ease of use, attitude toward use a positive relationship towards Innovativeness index
(Yiu, Grant, & Edgar, 2007)	Hong Kong	Questionnaire	Internet Banking adoption has a positive and significant relationship with personal innovativeness in information technology adoption of Internet Banking.
(Gourville, 2006)	United State	Questionnaire	Features of Innovation on cell phone have a significant relationship towards the new product adoption

Appendix B: Operationalization of model variable

Variables	Item	Measurement	References	Description
Relative Advantage	RA1	Interval	(Brown I. , Cajee, Davies, & Stroebel, 2003; Holak & Lehmann, 1990),	Smartphone are more convenient, reliable, and useful than normal mobile phones.
	RA2	Interval	(Yang, 2005)	Smartphone are more fashionable, stylish, and trendy.
	RA3	Interval	(Holak & Lehmann, 1990; Yiu, Grant, & Edgar, 2007)	The price/quality relationship is acceptable in smartphone, as I can enjoy other free services (e.g. e-mail, voice-mail, MSN & Skype, word processor) anywhere I want.
	RA4	Interval	(Yiu, Grant, & Edgar, 2007)	Smartphone has good integration of wide range of functions and services.
	RA5	Interval	(Gourville, 2006)	Smartphone bigger screen and full keyboard make different functions easier to use.

	Item	Measurement	References	Description
Price	P1	Interval	(Sinhaa & Batrab, 1999)	Price is the most important factor when purchasing Smartphone.
	P2	Interval	(Grewal, Krishanan, Baker, & Borin, 1998)	I compare prices of other Smartphone's brands and store brands before I choose one.
	P3	Interval	(Sinhaa & Batrab, 1999)	I buy Smartphone because they are worth to used regarding between with their price & usage quality.
	P4	Interval	(Richardson, Jain, & Dick, 1996)	I am uncertain which Smartphone's brands provide real value for money in terms

				of product quality.
	P5	Interval	(Steiner, 2004)	The cheapness of some Smartphone's brand suggests to me that they may have some risks, such as low quality.

Compatibility	C1	Interval	(Holak& Lehmann, 1990; Yang, 2005)	Smartphone is compatible and fit with my needs.
	C2	Interval	(Brown I. , Cajee, Davies, & Stroebel , 2003)	Smartphone is compatible and fit with my lifestyle / working style.
	C3	Interval	(Monk, Hassenzahl, Blythe, & Reed, 2002)	Smartphone fit with my habits of using cell phones.
	C4	Interval	(He, Duan, Fu, & Li , 2006)	Smartphone is a good complement to the traditional mobile phones for me.
	C5	Interval	(He, Duan, Fu, & Li , 2006)	Smartphone can fulfill my want and needs in current life.

Social Influence	SI1	Interval	(Isen, 2011)	Friends and family are very helpful to me in making decision of buying smartphone.
	SI2	Interval	(Denise E., 2005)	I will ask the opinions from my friends and family when buying a smartphone.
	SI3	Interval	(Nihal, 2011)	Friends and family give me valuable advice when I buying a smartphone.
	SI4	Interval	(Walczuch, 2004)	I trust my friends and family about their opinions and advices of smartphone.
	SI5	Interval	(Dora, 2012)	I will purchase a smartphone

				because my friends and family recommend to me.

Purchase Intention	PI1	Interval	(Ling, 2011)	I intend to purchase smartphone in the near future.
	PI2	Interval	(Tom & Kristin, 2005)	I search for information about smartphone from time to time.
	PI3	Interval	(Hyuk Jun & Margaret A, 2008)	I always talk about smartphone with my friends.
	PI4	Interval	(Rodoula, 2005)	Purchasing of smartphone is beneficial for my daily life.
	PI5	Interval	(Ching-Fu & Yu-Ying, 2008)	I willing recommend my friend to buy smartphone.

UNIVERSITI TUNKU ABDUL RAHMAN
Faculty of Business and Finance

BACHELOR OF MARKETING (HONS)

FINAL YEAR PROJECT

TITLE OF TOPIC:

Exploring the factors affecting purchase intention among smartphone: A study on young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.

Survey Questionnaires

Dear respondents,

We are undergraduate students of Universiti Tunku Abdul Rahman (UTAR) presently pursuing our Bachelor of Marketing (Hons). We are currently conducting a research project entitled "Exploring the factors affecting purchase intention among smartphone: A study on young adults in Universiti Tunku Abdul Rahman, Perak Campus, Malaysia".

The purpose of this research is to explore the factors that directly affecting purchase intention of young adults towards smartphone. This research will help future researcher and smartphone firms to understand what factor has trigger purchase intention of young adults in Malaysia and help to increase sales and demand.

Thank you for your cooperation and participation. If you have any queries, please do not hesitate to contact us.

Sincerely,

Chew Jing Qun   chewjingqun@gmail.com
Lee Jia Howe   jiahowe0890@gmail.com
Lim Chee Thai   thaichi1990@hotmail.com
Loke Wei Wen   weiwen_1990@hotmail.my
Wong Teik Kheng   james_wong@live.com

This questionnaire is aimed to get your personal opinion about smartphone, and will only be used in analysis of our thesis. Your real opinions are very important for us. Please answer all questions correctly. All responses are completely confidential.

Thanks you for your participation.

Instructions:

1) There are THREE (3) sections in this questionnaire. Please answer ALL questions in ALL sections.
2) Completion of this form will take you less than 5 minutes.
3) The contents of this questionnaire will be kept strictly confidential.

Section A: Demographic Profile

In this section, we would like you to fill in some of your personal details. Please TICK your answer and your answers will be kept strictly confidential.

1. **Gender**

   Male ☐   Female ☐

2. **Race**
   Malay ☐   Chinese ☐   Indian ☐   Others ☐

3. **Faculty**

   Foundation in Arts ☐

   Foundation in Science ☐

   Faculty of Arts and Social Science ☐

   Faculty of Business and Finance ☐

   Faculty of Engineering and Green Technology ☐

   Faculty of Information and Communication Technology ☐

   Faculty of Science ☐

4. **Personal spending monthly**

RM 500 and below ☐

RM 501– RM 800 ☐

RM 801 – RM 1000 ☐

RM 1 001 – RM 1 500 ☐

RM 1501 and above ☐

Section B: Factors that trigger purchase intention of smartphone

This section is seeking your opinion regarding the factors that trigger purchase intention of smartphone. Respondents are asked to indicate the extent to which they agreed or disagreed with each statement using 5 Likert scale [(1) = strongly disagree; (2) = disagree; (3) = neutral; (4) = agree and (5) = strongly agree] response framework. Please **CIRCLE** one number per line to indicate the extent to which you agree or disagree with the following statements.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
IV1	**Relative Advantage**					
RA1	Smartphone are more convenient, reliable, and useful than normal mobile phones.	1	2	3	4	5
RA2	Smartphone are more fashionable, stylish, and trendy.	1	2	3	4	5
RA3	The price/quality relationship is acceptable in smartphone, as I can enjoy other free services (e.g. e-mail, voice-mail, MSN & Skype, word processor) anywhere I want.	1	2	3	4	5
RA4	Smartphone has good integration of wide range of functions and services.	1	2	3	4	5
RA5	Smartphone bigger screen and full keyboard make different functions easier to use.	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
IV2	**Price**					
P1	Price is the most important factor when purchasing Smartphone.	**1**	**2**	**3**	**4**	**5**
P2	I compare prices of other Smartphone's brands and store brands before I choose one.	**1**	**2**	**3**	**4**	**5**
P3	I buy Smartphone because they are worth to used regarding between with their price & usage quality.	**1**	**2**	**3**	**4**	**5**
P4	I am uncertain which Smartphone's brands provide real value for money in terms of product quality.	**1**	**2**	**3**	**4**	**5**
P5	The cheapness of some Smartphone's brand suggests to me that they may have some risks, such as low quality.	**1**	**2**	**3**	**4**	**5**

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
IV3	**Compatibility**					
C1	Smartphone is compatible and fit with my needs.	**1**	**2**	**3**	**4**	**5**
C2	Smartphone is compatible and fit with my lifestyle / working style.	**1**	**2**	**3**	**4**	**5**
C3	Smartphone fit with my habits of using cell phones.	**1**	**2**	**3**	**4**	**5**
C4	Smartphone is a good complement to the traditional mobile phones for me.	**1**	**2**	**3**	**4**	**5**
C5	Smartphone can fulfill my want and needs in current life.	**1**	**2**	**3**	**4**	**5**

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
IV4	**Social Influence**					
SI1	Friends and family are very helpful to me in making decision of buying smartphone.	**1**	**2**	**3**	**4**	**5**
SI2	I will ask the opinions from my friends and family when buying a smartphone.	**1**	**2**	**3**	**4**	**5**
SI3	Friends and family give me valuable advice when I buying a smartphone.	**1**	**2**	**3**	**4**	**5**
SI4	I trust my friends and family about their opinions and advices of smartphone.	**1**	**2**	**3**	**4**	**5**
SI5	I will purchase a smartphone because my friends and family recommend to me.	**1**	**2**	**3**	**4**	**5**

Section C: Purchase intention of Smartphone

This section is seeking your opinion regarding the factors that trigger purchase intention of smartphone. Respondents are asked to indicate the extent to which they agreed or disagreed with each statement using 5 Likert scale [(1) = strongly disagree; (2) = disagree; (3) = neutral; (4) = agree and (5) = strongly agree] response framework. Please **CIRCLE** one number per line to indicate the extent to which you agree or disagree with the following statements.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
DV	**Purchase Intention**					
PI1	I intend to purchase smartphone in the near future.	**1**	**2**	**3**	**4**	**5**
PI2	I search for information about smartphone from time to time.	**1**	**2**	**3**	**4**	**5**
PI3	I always talk about smartphone with my friends.	**1**	**2**	**3**	**4**	**5**
PI4	Purchasing of smartphone is beneficial for my daily life.	**1**	**2**	**3**	**4**	**5**
PI5	I willing recommend my friend to buy smartphone.	**1**	**2**	**3**	**4**	**5**

Appendix C

50 sets of Pilot Test Result:

<u>Relative advantage</u>

Reliability Statistics

Cronbach's Alpha	N of Items
.729	5

<u>Price</u>

Reliability Statistics

Cronbach's Alpha	N of Items
.764	5

<u>Compatibility</u>

Reliability Statistics

Cronbach's Alpha	N of Items
.863	5

Social Influence

Reliability Statistics

Cronbach's Alpha	N of Items
.823	5

Purchase Intention

Reliability Statistics

Cronbach's Alpha	N of Items
.719	5

Original SPSS Result:

Relative advantage

Reliability Statistics

Cronbach's Alpha	N of Items
.716	5

Price

Reliability Statistics

Cronbach's Alpha	N of Items
.783	5

Compatibility

Reliability Statistics

Cronbach's Alpha	N of Items
.880	5

Social influence

Reliability Statistics

Cronbach's Alpha	N of Items
.758	5

Purchase intention

Reliability Statistics

Cronbach's Alpha	N of Items
.757	5

Pearson Correlation

Correlations

		RA_Ave	P_Ave	C_Ave	SI_Ave	PI_Ave
RA_Ave	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	400				
P_Ave	Pearson Correlation	.334**	1			
	Sig. (2-tailed)	.000				
	N	400	400			
C_Ave	Pearson Correlation	.147**	.389**	1		
	Sig. (2-tailed)	.003	.000			
	N	400	400	400		
SI_Ave	Pearson Correlation	.160**	.364**	.657**	1	
	Sig. (2-tailed)	.001	.000	.000		
	N	400	400	400	400	
PI_Ave	Pearson Correlation	.215**	.489**	.633**	.612**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	400	400	400	400	400

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

Multiple Regressions Analysis

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722[a]	.521	.516	.46552

a. Predictors: (Constant), SI Average, RA Average, P Average, C Average

b. Dependent Variable: PI Average

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	92.950	4	23.237	107.229	.000[a]
	Residual	85.600	395	.217		
	Total	178.550	399			

a. Predictors: (Constant), SI Average, RA Average, P Average, C Average

b. Dependent Variable: PI Average

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.508	.173		2.936	.004
	RA_Average	.041	.038	.039	1.057	.291
	P_Average	.238	.041	.235	5.856	.000
	C_Average	.276	.038	.341	7.211	.000
	SI_Average	.284	.045	.297	6.340	.000

a. Dependent Variable: PI_Average