FACTORS AFFECTING SMARTPHONE PURCHASE DECISION AMONG MALAYSIAN GENERATION Y

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ABSTRACT

The purpose of this study is to investigate the purchase decision of Malaysian Generation Y and its association with brand concern, convenience concern, dependency concern, price concern, product feature concern and social influence concern. The data set is collected through self-administered questionnaire, and convenient non-probability random sampling method. A total of 125 samples was collected from Klang Valley, Malaysia. The findings revealed that there is a significant relationship between all variables with purchasing decision, which indicates that the Smartphone purchase decision of Generation Y is influenced by brand concern, convenience concern, dependency concern, price concern, product feature concern and social influence concern. The findings of this study are limited by the number of respondents, area and location, and the absence of other methods to obtain the results other than secondary research and questionnaire. This study is important for marketers to understand the consumer's Smartphone purchase decision to be more competitive.

Keywords: Brand concern, Convenience concern, Dependency concern, Price concern, Product feature concern, Social influence concern, Purchasing decision, Generation Y.

1. INTRODUCTION

Smartphone is a mobile device which is more than merely make and receives phone calls, text messages, and voice mail. The basic feature of a Smartphone is able to access to the internet. It can also access digital media such as picture, music and videos. Also, Smartphone needs to have the ability to make use of small computer programs called applications or apps (Weinberg, 2012). From 2007 to 2010, there are more than 300,000 of mobile apps being developed and forecasted to have $35 billion of revenue by 2014 (International Data Corporation, 2010).

With the increasing development in technology and telecommunication sector, numbers of Smartphone users around the world is increasing. In Malaysia, some of the popular Smartphone brands are such as Apple, Samsung, HTC, Sony, Motorola, Nokia, and LG. Among these Smartphone brands, Samsung Galaxy and Apple iPhone have the strongest competition in the market. In the third quarter of global Smartphone market 2012, Samsung successfully overstepped Apple, according to a Reuter's poll (The Star (a), 2012).

According to Mr. Afrizal, the head of Ericsson Consumer Lab South East Asia & Oceania, "In Malaysia, non-Smartphone are still popular among consumers but Smartphone is expected to become more dominant in the market," (Avanti, 2012). A study by global information and measurement company Nielsen shows that there will be an increasing number of Smartphone users in Malaysia, where 79% of mobile users plan to purchase a Smartphone (MySinChew, 2012). International Data Corporation (IDC) Asia Pacific whereas indicate that, from 30% in year 2011, Smartphone market share are expected to increase up to 35% in the year 2012 in the Malaysia's mobile phone shipments (The Star (b), 2012).

In addition, Malaysia's Smartphone users among the internet users are expected to increase significantly from 47% to 73% (Avanti, 2012). It shows that there is a large opportunity in the Smartphone market in the near future and Smartphone producer should cope this opportunity well. But what factors drive consumer purchase decision in Smartphone purchasing?

In Malaysia, the majority of Smartphone users are aged from 25 to 34, high educated and full time employment with RM5000 income or more, according to a report on year 2011. In addition, the highest rate of internet usage using the Smartphone falls in the age group 25 to 34 years old (41%) and 18 to 24 years old (38%), which is generally the Generation Y (Enterprise News, 2011). Thus, this research will look into the Generation Y purchase decision toward Smartphone, due to Generation Y holds the highest Smartphone owning and usage rate. The most important usage of Smartphone for users is for browsing (41%), social network (37%), musics (63%) and using the internet on a further device (49%) (Enterprise News, 2011).

A study indicates that the key motivating factors for future Smartphone users are internet surfing (39%), upgrade from current devices (34%), and applications (29%) (Enterprise News, 2012). Also, the most important criteria that affect the Smartphone purchase decision is the trend in community (35.6%), followed by needs (34.4%) and software (33.1%) of the Smartphone (Osman, 2012). In the study by Ding et al. (2011), a few variables are tested such as social needs, social influence, convenience, and dependency. Social needs, social influence, convenience and dependency are also tested in a study by (Suki and Suki, 2013).

Factors such as compatibility, social influence, price and relative advantage is tested as well by Chew (2012). Liew (2012) tested variables such as entertainment, convenience, social needs, social

influence and dependency. With lots of possibilities that could affect consumer decision in purchasing Smartphone, it is essential for marketers to understand which impact on the purchase decision. But which factors have the greatest impact on the consumer purchase decision?

2. LITERATURE REVIEW

2.1. Consumer Decision Process

The consumer Behaviorism model suggested that consumer's purchase behavior generally passes through 5 stages, before and after the actual purchase, include needs recognition, information search, evaluation of alternatives, purchase decision and post-purchase behavior (Kotler and Keller, 2012). Decision making can be categorized into 3 different types, nominal decision making, limited decision making and extended decision making.

These are the purchase involvement of consumers which measure the concern for or interest in the purchase process. Nominal decision making normally happen when consumers purchasing low involvement product, low cost and familiar product which is frequently purchased. Limited decision making is in between nominal and extended decision making, which involve limited external search. Whereas extended decision making normally will be on the high involvement product; perhaps expensive products and unfamiliar products.

The more information search would need to be done and carefully considering attributes. Also, for different types of product with different level of involvement, consumer have different types of buying decision behavior, namely complex buying behavior, dissonance-reducing buying behavior, habitual buying behavior and variety seeking buying behavior.

2.2. Brand Concern

Brand is the most valuable asset for a company, where it represents a product or service means to consumers. Brands are more than just names and symbols. It is also the element of relationship between company and customers (Kotler and Armstrong, 2010). The brand name has directly influenced customer's perception toward the quality of the offering. When customers are satisfied, they generate word of mouth and it will lead to others to be interested and choose the brand (Azad and Safaei, 2012).

To enhance consumer response, marketers strive to build brand equity in order to capture consumer preference and loyalty. Brand equity is the added value endowed on products and services and it may reflect how consumers think, feel and act with the brand. A study on the effect of brand name toward cars shows that people trust the well know brand for its quality, performance and believe that brand shows a person lifestyle and societal status. Brand is a name, term, design, symbol or any feature that identifies one seller's goods or services as distinct from those of other sellers. According to research, brand has a moderate impact on consumer behavior. In terms of gender, it's impact female more than male.

Also, lower income group consumers have a greater impact on brand toward their behavior due to after sales service and limited purchasing capacity (Bhattacharya and Mitra, n.d). 53.3% of people strongly agree that they choose a brand due to perceived good brand quality (Farzana, 2012). It shows that brand could influence purchase decisions, and it should be further look into the

effect of factors such as brand awareness, brand equity and brand association has on purchase decision.

2.3. Convenience Concern

Convenience refers to a situation where works are simplified, easy and can be done with less effort, without discomfort or difficulty. Convenience in Smartphone may refer to the ability to use the Smartphone at anytime and anywhere, without having to port the Smartphone in a fixed workstation (Ding *et al.*, 2011).

Nowadays, people want things to be done at the fingertips. The use of applications (apps) in Smartphone has flourished businesses by having ability such as documenting expenses and processing credit cards anywhere (Ranson, 2009). Smartphone is a 4 inch device which performs as powerful like a heavy and big size laptop. It able to do everything like a laptop, keeping everything such as documents, photos, games and apps in one's pocket, (Anthony, 2012). In Malaysia, Wi-Fi is everywhere especially in the city and restaurants, making surfing internet become convenience. Internet access is also provided by major telecommunication providers in Malaysia such as Maxis, Digi, Celcom, and Umobile.

By having Smartphone that equipped with wi-fi and internet access ability, online doesn't restrict on desktop or laptop surfing. A study shows there is a high usage of Smartphone for medical apps such as disease diagnosis management and drug reference among medical students and junior doctors for education and clinical practice purposes (Payne *et al.*, 2012). Instead of flipping books, medical knowledge can be very fast and convenient through Smartphone apps. A study by Liew (2012) also used convenient as one of the determinants to test the significant relationship with demand of Smartphone. Another studies by Ding *et al.* (2011) and Suki and Suki (2013) whereas found the significant relationship between convenience and university students' dependency on Smartphone with purchase behavior.

2.4. Dependency Concern

Dependency is the strong propensity for continuous high usage, being engaged and unwilling to be apart from it (Ding *et al.*, 2011). Smartphone is no longer a phone for calling and instant messaging alone. For the younger generation, online education or E-learning has growing popularity in countries such as Malaysia, China, South Korea and India. People have become much dependent on Smartphone by doing most of the jobs using a Smartphone, where formerly it can be done without Smartphone.

Camera, MP3, notes, contact lists is all in the Smartphone, making people unable to do their work without Smartphone. In the United State, with growing dependency toward Smartphone, more people interact with the Smartphone rather than human. People are so obsessed that company introduced thousands of apps to make their Smartphone usage experience better (Gibson, 2011). In Malaysia, people spending around 20 hours per week in average to online, with the purpose of connecting to people, learning, leisure and online purchase. Smartphone and tablets have also become an important device in surfing the internet (Lisa, 2011).

Not only marital issues arise, social and communication skills of people also becoming poor and texting become a way of communication instead of talking (Lim, 2013). A study shows there is

a positive relationship between university students' dependency and their future purchase behavior, and "high dependency on Smartphone tends to make evaluations based on their past experiences in determining future purchase behavior" (Ding *et al.*, 2011). A very strong relationship is also exists between students' dependency on Smartphone and their purchase behavior in the study by Suki and Suki (2013).

2.5. Price Concern

"Price is the amount of money charged for a product or service, or the sum of the values that customers exchange for the benefits of having or using the product or service" (Kotler and Armstrong, 2010). Price is basically the amount of money a consumer willing to pay for in exchange with products and services that they think are valuable. The value of money varies from different people. Some might think it is valuable for a high price but others might think it does not worth for the value of money.

There are so many methods of pricing, such as markup pricing, target-return pricing, perceived-value pricing, going rate pricing and promotional pricing (Kotler and Keller, 2012). If the discount rate is low, it should be presented in its value; whereas if the discount rate is high, it should be presented in percentage, so that customers will have higher purchase intention (Isabella, 2012). DMD Mobile Sdn Bhd Malaysia has launched a full-featured Smartphone operating on the Android platform.

This Smartphone cost RM500 or below, aiming those who find spending RM1000 to RM2000 for Smartphone is a barrier (Asohan, 2012). It shows an encouragement from the local company in adopting Smartphone to the Malaysian, by adjusting the price of Smartphone. Also, in year 2013, Malaysian youth who aged 21 to 30, with monthly earning less than RM300 is eligible to get a RM200 government rebate on a Smartphone (The Star, 2013).

It shows encouragement from the Malaysian government to the youth, which is the Generation Y to use a Smartphone by offering better price especially those who concern about pricing of Smartphone. In this case, price is the driven factor in a purchase decision. Price concern is one of the determinants tested to find out the effects on demand of Smartphone (Chow, 2011). A research found that price significantly impact on the purchase intention of Smartphone among young adults in UTAR, Perak, Malaysia based on a study (Chew, 2012).

2.6. Product Features Concern

Feature is an attribute of a product to meet the satisfaction level of consumers' needs and wants, through owning of the product, usage, and utilization of a product. Product features including hardware and software. Hardware is the description for a device that can be touched physically.

The hardware of a Smartphone is the body of the phone itself, size and weight. Color and design are also considered as hardware as it is the physical appearance of the Smartphone. Software whereas is the general term for computer programs, procedure and documentation.

The software of a Smartphone is the operating platform, storage memory, or apps that run the phone. The software for a phone in the market is such as iOS, Android, Windows, RIM Blackberry, Symbian, Bada and maemo. Among the Smartphone user segment, Android users are the largest

consist of 43%, IOS users come second with 28%, RIM Blackberry is 18% and the rest is others. Overall, Android is still the most popular Smartphone operating system in the United State (Mobile, 2011). Another study on operating system Malaysians used shows Android consist of 42%, Symbian 18%, whereas iOS, RIM Blackberry and Windows are the same at 6% (Russell, 2012). According to a research, factor affecting ones to acquire a Smartphone due to software consists of 33 % whereas hardware has only 17.6%.

It shows that software is much more important than hardware in making Smartphone purchase decision. However, in the same research, Smartphone's design gain the most importance of the device specification, it consists of 56%, exceed the importance of wi-fi (38.5%), computing power (34.2%), price (30.2%) and others (Osman, 2012).

2.7. Social Influence Concern

"A consumer behavior is influenced by social factors, such as the consumer's small groups, family, and social roles and status" (Kotler and Armstrong, 2010). During the decision making process, consumers tend to always influence by the social group, which is the people. Depending on various factors, consumers might listen and believe in different social groups, perhaps to those who are more professional in certain fields. In the purchasing of Smartphone for Generation Y, perhaps the social influence might come from friends, peers, family members and spouse. According to a research, consumers' purchase behavior is shaped up by others, especially by family members while buying high-involvement products (Farzana, 2012).

According to another research, in Malaysia, 35.6% of 1814 respondents feels that the trend in community is one of the important criteria that influence Smartphone purchase decision (Osman, 2012). A study also found that social influence has a significant relationship of student's dependency on a Smartphone (Ding *et al.*, 2011).

Another study towards Malaysian young adult of age 19 to 25 shows that both direct and vicarious role models have an impact on the consumer's purchase intention, in which direct role model refers to parents and vicarious role model refer to celebrities. Result shows celebrities have higher influence than parents (Ernest *et al.*, 2010). Social influence indeed plays a significant role and it is the most influential to student's dependency on Smartphone (Suki and Suki, 2013).

3. METHODOLOGY

Both primary and secondary data will be used in order to complete this study. Primary data collection is done through self-administered questionnaire distribution. The questionnaire is handed out by physical distribution and online distribution. For physical distribution, respondent located in Bukit Jalil is chosen.

The majority of the respondents consist of students from the Asia Pacific University of Technology and Innovation (APU) and Technology Park Malaysia College (TPM). For online distribution, it is distributed through email as well as social media to people around Klang Valley. It is distributed by convenient non-probability random sampling method, where respondents are chosen randomly among the targeted group.

The result obtained from online distribution is not a summarized result. It is received in individual answers. In this research, 150 questionnaires are distributed. Questionnaire distribution

is controlled, so that it do not bias to only one age group or gender. For secondary research, data are collected through literature review. Information is obtained from various sources such as Google scholar, a directory of open access journals (DOAJ) and Emerald.

The scope of the literature reviewed include area like consumer behavior, consumer decision process, Smartphone in Malaysia, Generation Y and determinant of the purchase decision, including brand concern, convenience concern, dependency concern, price concern, product feature concern and social influence concern. Variables derived from these literature reviews is investigated through primary research.

3.1. Research Instrument

In this research, instrument used in primary research is questionnaire. The questionnaire consists of TWO section, namely Section A and Section B. All the questions in this questionnaire are design using English, which is simple for respondents to understand and answer. The questions asked are directly linked to the objectives of this research.

Section A consists of multiple choice question and Section B are in the form of five-point Likert-scale. There are total 34 questions. Respondents are allowed to select only one answer for one question in the entire questionnaire. All questions must be answered, and failing to do so may void the questionnaire to be used in the data analysis.

4. RESEARCH AND FINDINGS

4.1. Respondent's Characteristics

Based on the findings of the 125 samples, 55.2% are female, indicating that female Smartphone users are slightly higher than male, who accounted for 44.8% of the sample. Male and female have a closely equal ratio with only differs by 10.4%. In terms of age group, there are 25.6% of respondents aged between 18 to 22, 39.2% aged between 22 to 25, 18.4% aged between 26 to 29 and 16.8% aged between 30 to 33.

Age 22 to 25 consist the highest percentage and follow from age 18 to 21. It shows a majority of the respondents are at the early stage of Generation Y. This could be due to part of the data collection is conducted in colleges, and most students are in this age range. Also, the finding shows that there are 0% of respondents from the age group of less than 18 and 34 and above. It is due to the targeted sample for this study is on Generation Y, who age from 18 to 33. These two options are made, are meant to ensure that data from samples which do not meet the requirement of Generation Y will not be used, because questionnaires which select one of these two options will be voided. Based on education level, there are 14.4% of respondents in SPM level, 7.2% on foundation level, 32% in diploma level, 39.2% in degree level, 6.4% in master level and only 0.8% in PhD level.

The highest percentage is degree holders and followed by diploma holders, which is consistent with the majority age group of 18 to 25 who are college and university students. Referring to income level, income below RM500 consists of 32.8%, followed by 25.6% of respondents with income between RM501 to RM2000, 17.6% with income between RM2001 to RM3500, 16% with income between 3501 to RM5000, 4.8% with income between RM5001 to RM6500 and 3.2% with income of RM6501 and above. More than half of the respondents among 125 samples have an

income below RM2000, perhaps due to most of the Generation Y are still studying without income, or fresh graduate who earns only entry level income.

4.2. Brand Concern

39.2% of the respondents agree that they prefer to buy an international recognized brand of Smartphone, 48.8% of the respondents strongly agree that they prefer to buy only a trustworthy brand, 32.8% of the respondents agree that they will only buy the favorite brand, and 32% of the respondents agree that brand name is the factor influencing their decision in buying Smartphone. The mean of the Brand Concern variable is 15.46 while the median is 16, indicating that both mean and median are in the same central tendency. In the categorization of 4 to 12 equal to low and 13 to 20 equal to high, the central tendency of a Brand Concern variable is in the category of high.

In the cross tabulation of respondent's profile, usage length and brand of Smartphone with the variable of Brand Concern, it is found that those who are high in Brand Concern in the Purchase Decision of Smartphone tends to be female (54.8%), age between 22 to 25 (38.5%), tertiary level of education (50.0%), and income is between RM501 to RM3500 (41.3%). The length of Smartphone usage is 1 to 3 years (52.9%) and the brand used is the Samsung (42.9%).

4.3. Convenience Concern

44.8% of the respondents agree that Smartphone makes them accomplish tasks more quickly, 35.2% of the respondents agree that Smartphone save their time in doing work, 33.6% of the respondents agree that they prefer to carry a Smartphone rather than a laptop, and 35.2% of the respondents agree that having Smartphone means having phone and computer together. The mean of the Convenience Concern variable is 14.56 while the median is 15, indicating that both mean and median are in the same central tendency.

In the categorization of 4 to 12 equal to low and 13 to 20 equal to high, the central tendency of a Brand Concern variable is in the category of high. In the cross tabulation of respondent's profile, usage length and brand of Smartphone with the variable of Convenience Concern, it is found that those who are high in Convenience Concern in the Purchase Decision of Smartphone tends to be female (56.1%), age between 22 to 25 (34.7%), tertiary level of education (43.9%), and income is between RM501 to RM3500 (41.8%). The length of Smartphone usage is 1 to 3 years (53.1%) and the brand used is Samsung (46.9%).

4.4. Dependency Concern

36.8% of the respondents agree that Smartphone usage in their daily life is high, 24.8% of the respondents are neutral in feeling insecure for not having Smartphone around them, 24.0% of the respondents are neutral by always using Smartphone for work and studies, and 26.4% of the respondents agree that they cannot do anything in their work and studies without a Smartphone. The mean of Dependency Concern variable is 13.30 while the median is 14, indicating that both mean and median are in the same central tendency.

In the categorization of 4 to 12 equal to low and 13 to 20 equal to high, the central tendency of a Dependency Concern variable is in the category of high. In the cross tabulation of respondent's profile, usage length and brand of Smartphone with the variable of Dependency Concern, it is

found that those who are high in Dependency Concern in the Purchase Decision of Smartphone tends to be female (57.8%), age between 22 to 25 (41.0%), tertiary level of education (48.2%), and income is between RM501 to RM3500 (43.4%). The length of Smartphone usage is 1 to 3 years (51.8%) and the brand used is Samsung (50.6%).

4.5. Price Concern

31.2% of the respondents are neutral in buying Smartphone on high price, 36.0% of the respondents whereas are neutral on buying Smartphone in deducted price, 33.6% of the respondents is neutral with the thinking of Smartphone in overall is expensive, and 35.2% of the respondents agree that price is the main consideration when it comes to deciding to buy a Smartphone. The mean of Price Concern variable is 13.45 while the median is 14, indicating that both mean and median are in the same central tendency. In the categorization of 4 to 12 equal to low and 13 to 20 equal to high, the central tendency of Dependency Concern variable is in the category of high.

In the cross tabulation of respondent's profile, usage length and brand of Smartphone with the variable of Price Concern, it is found that those who are high in Price Concern in the Purchase Decision of Smartphone tends to be female (58.4%), age between 22 to 25 (42.9%), tertiary level of education (45.5%), and income is RM500 and below (37.8%). The length of Smartphone usage is 1 to 3 years (50.6%) and the brand used is Samsung (48.1%).

4.6. Product Feature Concern

42.4% of the respondents agree that they like the design of Smartphone, 43.2% of the respondents agree that Smartphone has the applications that they need, 47.2% of the respondents agree that Smartphone internet accessibility is speedier than basic phone, and 36.0% of the respondents strongly agree that they use Smartphone due to the operating system. The mean of Product Feature Concern variable is 15.76 while the median is 16, indicating that both mean and median are in the same central tendency.

In the categorization of 4 to 12 equal to low and 13 to 20 equal to high, the central tendency of Dependency Concern variable is in the category of high. In the cross tabulation of respondent's profile, usage length and brand of Smartphone with the variable of Product Feature Concern, it is found that those who are high in Product Feature Concern in the Purchase Decision of Smartphone tends to be female (53.2%), age between 22 to 25 (39.4%), tertiary level of education (47.7%), and income is between RM501 to RM3500 (40.4%). The length of Smartphone usage is 1 to 3 years (53.2%) and the brand used is Samsung (45.0%).

4.7. Social Influence Concern

43.2% of the respondents agree that almost all of their friends and family members are using Smartphone, 32.0% of the respondents are neutral for friends and family members' thought of having a Smartphone, 29.6% of the respondents are neutral for being influenced by friends and family members, and 32.0% of the respondents are neutral for being stimulated by people around to buy Smartphone. The mean of Social Influence Concern variable is 13.12 while the median is 13, indicating that both mean and median are in the same central tendency. In the categorization of 4 to

12 equal to low and 13 to 20 equal to high, the central tendency of Dependency Concern variable is in the category of high. In the cross tabulation of respondent's profile, usage length and brand of Smartphone with the variable of Social Influence Concern, it is found that those who are high in Social Influence Concern in the Purchase Decision of Smartphone tends to be female (60.0%), age between 22 to 25 (43.9%), tertiary level of education (47.1%), and income is between RM501 to RM3500 (38.6%). The length of Smartphone usage is 1 to 3 years (54.3%) and the brand used is Samsung (50.0%).

4.8. Purchase Decision

40.0% of the respondents agree that they are satisfied with the overall Smartphone experience, 42.4% of the respondents agree that they have a more positive experience than negative experience in using Smartphone, 40.0% of the respondents strongly agree that they intended to continue using Smartphone again in the future, and 40.8% of the respondents strongly agree that they would have a better purchase of Smartphone based on the experience that they get. The mean of Purchase Decision concern variable is 15.78 while the median is 16, indicating that both mean and median are in the same central tendency. In the categorization of 4 to 12 equal to low and 13 to 20 equal to high, the central tendency of Dependency Concern variable is in the category of high. In the cross tabulation of respondent's profile, usage length and brand of Smartphone with the variable of Purchase Decision, it is found that those who are high in Purchase Decision of Smartphone tend to be female (50.5%), age between 22 to 25 (41.0%), tertiary level of education (49.5%), and income is between RM501 to RM3500 (42.9%). The length of Smartphone usage is 1 to 3 years (55.2%) and the brand used is Samsung (43.8%).

4.9. Pearson Product Moment Correlation Test

Pearson Correlation is a measure of the degree of linear relationship between two variables. A variable correlate with itself will always have a correlation coefficient of +1.0. All of the variables tested shows positive relationship. The strongest relationship of independent variable with dependent variable is between Product Feature Concern with Purchase Decision (0.777), followed by Convenience Concern with Purchase Decision (0.660), Brand Concern with Purchase Decision (0.659), Dependency Concern with Purchase Decision (0.591), Social Influence Concern with Purchase Decision (0.540), and Price Concern with Purchase Decision (0.380). This indicates that Malaysia Generation Y Smartphone users are strongly Product Feature Concern during making Purchase Decision on Smartphone.

Convenience is the second factor to consider whereas brand comes third. These 3 factors are considered as factors with "high impact" on them. Smartphone Purchase Decision is also influenced by Dependency Concern and Social Influence Concern. Price Concern come last among the total of six factors, indicating Smartphone users do not consider price much when they are making Purchase Decision. They are not price sensitive.

4.10. Correlation Research Findings

All the variables tested shows positive relationship. It attests the consistencies with literature review. The variable that has strongest to least relationship with Purchase Decision is in this

following sequence: Product Feature Concern, Convenience Concern, Brand Concern, Dependency Concern, Social Influence Concern and Price Concern.

H01 indicates that there is no significant correlation between Brand Concern with Customer Purchase Decision. Result shows $p < 0.01$ and $r = 0.659$, indicating that H01 is rejected. Few past studies also supported and re-affirm this hypothesis. A study by Bhattacharya and Mitra, (n.d) shows there is a moderate impact of brand on consumer behavior and it is more upon female group than male group. Another study also shows that brand has a strong influence on purchase decision as people not only trust the well know brand for its quality, performance or good past experience, but also beliefs that brand shows a person lifestyle and status in the society. Thus, it concludes that there is a significant correlation between Brand Concern with Customer Purchase Decision.

H02 indicates that there is no significant correlation between Convenience Concern with Customer Purchase Decision. The result shows $up < 0.01$ and $are = 0.660$, indicating that H02 is rejected. Few past studies also supported and re-affirm this hypothesis. Studies by Ding *et al.* (2011) and Suki and Suki (2013) had found that there is a significant relationship between convenience and university students' dependency on Smartphone with purchase behavior. Thus, it concludes that there is a significant correlation between Convenience Concern with Customer Purchase Decision.

H03 indicates that there is no significant correlation between Dependency Concern with Customer Purchase Decision. Result shows $p < 0.01$ and $r = 0.591$, indicating that H03 is rejected. Few past studies also supported and re-affirm this hypothesis. A study shows there is a positive relationship between university students' dependency and their future purchase behavior, and "high dependency on Smartphone tends to make evaluations based on their past experiences in determining future purchase behavior" (Ding *et al.*, 2011).

A very strong relationship is also exist between students' dependency on Smartphone and their purchase behavior in the study by Suki and Suki (2013). Thus, it concludes that there is a significant correlation between Dependency Concern with Customer Purchase Decision.

H04 indicates that there is no significant correlation between Price Concern with Customer Purchase Decision. The result shows $up < 0.01$ and $are = 0.380$, indicating that H04 is rejected. The hypothesis is supported and re-affirms, where a researcher found that price significantly impact on the purchase intention of Smartphone among young adults in UTAR, Perak Campus, Malaysia based on a study (Chew, 2012). Thus, it concludes that there is a significant correlation between Price Concern with Customer Purchase Decision.

H05 indicates that there is no significant correlation between Product Feature Concern with Customer Purchase Decision. The result shows $up < 0.01$ and $are = 0.777$, indicating that H05 is rejected. Few past studies also supported and re-affirm this hypothesis. Both hardware and software are part of the Product Feature of the Smartphone.

According to a research, factor affecting ones to acquire a Smartphone due to software consists of 33 % whereas hardware has 17.6%. Even though software seems to be more important than hardware in affecting ones to acquire Smartphone, the total of both of these elements had accounted 50.6%, which is more than half of the variables of the research, indicating it is very influential in acquiring of Smartphone (Osman, 2012). Thus, it concludes that there is a significant correlation between Product Feature Concern with Customer Purchase Decision.

H06 indicates that there is no significant correlation between Social Influence Concern with Customer Purchase Decision. The result shows *up* < 0.01 and *are* = 0.540, indicating that H01 is rejected. Few past studies also supported and re-affirm this hypothesis.

A study found that social influence has a significant relationship of student's dependency on a Smartphone (Ding *et al.*, 2011). Social Influence is the second highest affecting students' dependency on Smartphone among three variables tested Suki and Suki (2013) and it is the second highest among four variables tested by Chew (2012). Thus, it concludes that there is a significant correlation between Social Influence Concern with Customer Purchase Decision.

5. CONCLUSION, MANAGERIAL IMPLICATION AND RECOMMENDATIONS

Based on the information obtained from the study towards factors affecting Smartphone purchase behavior among Generation Y, some managerial implications and recommendation of researcher are given, where it might be useful for the companies for their future strategies planning on improving Smartphone sales. With the large opportunities in the Smartphone market in the near future, Smartphone provider should seize the opportunities to fulfill what affects Purchase Decision of users.

The study shows majority of the Smartphone users will consider product feature at first. Smartphone provider should study on what features the users demand for, for example higher image resolution of the camera, better and faster operating system, smarter and lighter design, and any other new innovative of product features for both software and hardware. By better improve the Product Feature, and providing what is demanded, it might help Smartphone provider to improve sales and profit.

Convenience is the second consideration based on the research, indicate that Smartphone users buying Smartphone due to its convenience. With Smartphone, tasks can be accomplished faster, and users do not bring a laptop because Smartphone can perform what laptop could. Smartphone providers can focus on making Smartphone usage more convenience such as longer battery life, a slightly larger screen size that making use Smartphone everywhere is convenience.

The third consideration of Smartphone purchase decision is a Brand. It is important for the Smartphone provider to build their strong brand name, particularly by innovating something new and be the pioneer in the market, or by its unique selling proposition. Perhaps, not only the Smartphone product itself only could help to build the brand, Smartphone provider can consider other method such as good customer service, social responsibility and many more. With international recognized and strong brand, users are more confident in that brand and it is perceived to be more trustworthy. Followed by dependency, the result shows dependency will influence the purchase decision and for some users, they might depend to the Smartphone until feeling insecure when Smartphone is not around.

However, it is not the main factors to affect the purchase decision. To improve, Smartphone provider can innovate something for users to depend on it. For example alarm, mapping, documentation and contact list are the existing features to make users dependent on the Smartphone, especially for students and working class, documentation somehow can be very important to them and for drivers, they are much dependent on the map during they are driving on the road.

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Social influence also has a significant impact on Smartphone users purchase decision, where users are referring to friends, family, and people around them. It also has less impact on affecting the purchase decision as compare to the other selected variables tested in this study. Smartphone provider could have more socializing with the targeted market create positive word of mouth among them to spread it to others.

Even though research shows a relatively low effect, but the social influence could really affect one's purchase decision. Thus, better customer service and after sales service should also be provided in order to create dissatisfaction and create negative word of mouth. Lastly, price has the least impact on Smartphone users' Purchase Decision, which indicates that pricing strategy should not be the main concern for the company.

Price of Smartphone will not be so important to the users and it is the last variables to consider. It indicates that, if Smartphone provider could provide a Smartphone with a very good product feature, users will still buy it even its price is higher. Smartphone provider shouldn't focus much on pricing strategy like setting psychological pricing, because the impact is very least.

6. ACKNOWLEDGEMENT

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