Factors Influencing Purchasing Intention of Smartphones among UTHM Students

Umi Kartini Rashid[1,*], Juzaimi Nasuredin[2], Siti Sarah Omar[1] & Fadillah Ismail[3]

[1]Department of Business Management, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia (UTHM), Parit Raja, Batu Pahat, 86400, MALAYSIA

[2]Department of Technology Management, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia (UTHM), Parit Raja, Batu Pahat, 86400, MALAYSIA

[3]Department of Production and Operations, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia (UTHM), Parit Raja, Batu Pahat, 86400, MALAYSIA

* Corresponding Author Designation

Abstract: Smartphone has dramatically become a part of lifestyle for the people around the world. Despite the pervasiveness of smartphone penetration in Malaysia, studies that have been conducted to understand the consumers' preferences on a smartphone, especially for young adults are still lacking. Therefore, this study attempted to examine the factors that influenced the purchase intention of smartphones among UTHM students, namely product features, brand name, product price and social influence. A total of 375 structured questionnaires were distributed among undergraduate students in UTHM using probability sampling technique and data was analysed using SPSS. The results revealed that all four factors had significant relationships with the purchase intention. This study is important for the marketers to understand the consumers' behaviour and to be more competitive towards their target segmentation's smartphone purchase decision. However, in consideration with the limitation of population and sampling size, future researchers are suggested to conduct the similar study in a bigger population such as comparing among the different states in Malaysia for more rigorous findings and to be able to generalize in a bigger context.

Keywords: Product Features, Brand Name, Product Price, Social Influence, Purchase Intention.

1. Introduction

Smartphone is a combination of a personal device assistant and mobile phone that uses an advanced operating system and allows users to install new applications, constantly connect to the Internet, and provide multiple functions for both (Mohd Suki, 2013). In general, it is an extension of traditional handheld phones yet more than just making and receiving calls, text messages and voicemails. The basic function of a smartphone is to have access to the Internet. It also has access to digital media such as pictures, music and videos (Lim, Kok-Siew, & Chan, 2013).

As the technology and telecommunications industries continue to evolve, more advanced and sophisticated smartphone is introduced and launched almost every year. Smartphone nowadays has been deeply accepted by most people around the world, particularly among young adult consumers. Thus, smartphones are increasingly intertwined with people's daily activities because it makes their lives easier to access the Internet 24 hours a day, 7 days a week, 365 days a year (Mohd Suki, 2013).

1.1 Research Background

Smartphones have rapidly become the preference device for most Malaysian to remain connected. According to the statistics by the Malaysian Communications and Multimedia Commission (MCMC), the proportion of smartphone users continued to rise from 68.7% in 2016 to 75.9% in 2017 (MCMC Statistic, 2017, Q1). However, when referring to the gender ratio of smartphone users in Malaysia, male users were higher than females. In 2017, the total number of male smartphone users were 58.9%, compared to female users with only 41.1%, and the ratio was 1.43 (MCMC Statistic, 2017, Q1). Based on the results of HPUS (2017), the age group of 20 to 24 is the largest group of smartphone users, accounting for 18.4%. This data supported Balakrishnan and Yeow (2007) who stated that young people are more satisfied with the performance of smartphones than older people.

Thus, since smartphone technology is rapidly evolving, an understanding of the critical factors that influence the adoption of smartphones is an important topic to be studied. Therefore, the aim of this study is to examine the factors that influenced the purchase intention of smartphones among UTHM students.

1.2 Problem Statements

Despite the pervasiveness of smartphone penetration in Malaysia, studies that have been conducted to determine the consumers' preferences on smartphone particularly among young adults (Osman, Zawawi Talib, Sanusi, Yen, & Alwi, 2015) are still lacking and therefore need to be focused on. This is because the marketers are lack of understanding on the smartphone usage behaviour and preferences among the consumers (Safin, Ali, Rahim, Kheng, & Abas, 2016).

Apart from that, most of the studies had focused on the usage of specific mobile applications, leaving the overall picture of the smartphone market in Malaysia unclear, and more over the statistics were difficult to obtain. In addition to this, regardless of "technology savvy" era, it is very difficult to study, analyse and interpret consumer purchase intention (Ling, 2014).

Furthermore, empirical results from previous studies broadly confirmed the theory's predictions regarding the relationships between product features, brand name, product price and social influence toward purchase intention of smartphone (Adetola & Dili Ifeanyichukwu, 2016; Chew, Lim, Lee, 2012; Kaushal & Rakesh, 2016; Ling, 2014; Mei Min, Ling Hong, Jian Ai, & Pei Wah, 2009; Safin *et al.*, 2016; Shabrin *et al.*, 2017; Trivedi & Raval, 2016). In other cases, Adetola and Dili Ifeanyichukwu (2016) failed to find the links between brand name and social influence toward purchase intention of smartphones and called for more studies with more reliable measures. Not only that, Kaushal and Rakesh (2016) also failed to find the links between product features, brand name and product price

towards the purchase intention of smartphones. Therefore, this study aimed to identify whether there were significant relationships between the variables, namely product features, brand name, product price and social influence towards the purchase intention of smartphones among UTHM students.

1.3 Research Questions

There are a few questions raised to provide a path toward this research:

 (i)   What is the relationship between product features and purchase intention of smartphone?
 (ii) What is the relationship between brand name and purchase intention of smartphone?
 (iii) What is the relationship between product price and purchase intention of smartphone?
 (iv) What is the relationship between social influence and purchase intention of smartphone?

1.4 Research Objectives

The specific objectives of this study, derived from the identified research gaps in the literature, are stated as follows:

 (i)   To identify the relationship between product features and purchase intention of smartphone.
 (ii) To identify the relationship between brand name and purchase intention of smartphone.
 (iii) To identify the relationship between product price and purchase intention of smartphone.
 (iv) To identify the relationship between social influence and purchase intention of smartphone.

1.5 Significance of the Study

Firstly, this research may serve as a guide and reference for the students undertaking similar studies. Next, it may also become a useful reference for future researchers who plan to make any related study precisely. Thirdly, this study is able to provide the contribution of the best and useful concept for the firms of the smartphone to better understand on the factors that influence the purchase intention of smartphones among university students in Malaysia. Through this study, smartphone firms could gain the latest information to better understand consumers' requirement of the smartphone, such as the features of smartphone-like design, colour, function, application and price setting. Thus, practitioners such as smartphone manufacturers and application developers can strategize better marketing strategies with these appreciate information and plan for future directions. This can also help the firms to boost their sales among university students in Malaysia.

1.6 Scope of the Study

This study has been conducted at Universiti Tun Hussein Onn Malaysia (UTHM). The respondents targeted in this study were the students residing in the main campus of Parit Raja and also Pagoh campus with a total population of 17,500. In addition, the sample was selected randomly based on Krejcie and Morgan (1970), which is 375 respondents. This study applied a quantitative method and a survey questionnaire was designed to collect primary data intended for this study. The data was collected by distributing the questionnaire to the respondents by online Google Form. Then, the data was analysed by using the SPSS software.

2. Literature Review

2.1 Purchase Intention

Purchase intention can be defined as a pre-plan for the purchase of a certain good or service in the future, not necessarily to implement the purchase intention due to it is affected by the ability to perform (Warshaw & Davis, 1985). In other words, what the consumer thinks and will buy in their mind

represents the purchase intention (Blackwell, Miniard & Engel, 2001). The similar researchers also state that the consumers are purchased through a process that recognizes the product, and then find the information about the product, evaluation, purchase and feedback. Therefore, they will make research in advance before purchasing a product in order to ensure that they will purchase the right product that meets their requirement.

Besides that, there are many smartphone brands on the market to choose from to meet the needs and wants of consumers with different tastes and preferences. Therefore, consumer buying behaviour depends on their characteristics which include brand conscious, price-conscious, quality conscious, recreation conscious, innovation conscious, mixed up with over choices as well as impulsiveness (Leo, Bennett, & Härtel, 2005). Thus, it is important to examine the factors that lead to the consumer's intention to purchase a smartphone. This study is to examine variables such as product features, brand name, product price and social influence towards purchasing intention of smartphone among university students in UTHM.

As a result, purchase intention is a common tool used by marketers to predict the sale of existing goods and services (Armstrong, Morwitz, & Kumar, 2000) because it can help them segment the market properly and support their decision making such as when and where their product are launched (Sewall, 1981). Therefore, previous studies proved that there are a significant relationship between product features, brand name, product price and social influence with purchase intention (Adetola & Dili Ifeanyichukwu, 2016; Chew, Lim, Lee, 2012; Mei Min *et al.*, 2009; Safin *et al.*, 2016; Shabrin *et al.*, 2017; Trivedi & Raval, 2018).

2.2 Product Features

Product features can be defined as the attributes of a product that can help to satisfy consumers' preferences through having the product, using and applying the product (Kotler & Armstrong, 2010). According to the previous study by Gülfem and Büyüközkan (2007), product features have similar meanings to the physical characteristics, technical features, functionality and extended attributes of product that can meet the variety needs of the people. Several researchers stated that physical attributes of the product such as art and fashion design, storage space and capacity, durability of the battery, size of the screen, buttons and related components and processes can influence consumer choice (Haverila, 2011; Mohd Suki, 2013; Pirhonen, Brewster, & Holguin, 2002). This supported study by Safin *et al.* (2016) which declared that different people would choose the smartphone with different features that can satisfy with their needs and desires.

In this research, smartphone features can be categorized into hardware and software. Hardware is a description of a device that can be physically touched, whereas software is a general term for computer programs, procedures, and documentation (Lim *et al.*, 2013). Here, the hardware of a smartphone is the body of phones itself such as size, weight, colour and design. Meanwhile, the software of a smartphone is the operating platform for running the mobile phone, storing memory or applications such as IOS from Apple, Windows from Microsoft, Android, Blackberry and Symbian (Russell, 2012). Based on the previous study done by Lim *et al.* (2013) and Safin *et al.* (2016) indicate that most of the young students of colleges and universities preferred to purchase smartphone or consider the smartphone according to its physical appearance, size, weight, colour, menu organization and related programs and processes before purchasing. Other studies also stated that factors that influence the purchase intention of mobile phones, features and design are one of the main factors leading to results (Dziwornu, 2013).

2.3 Brand Name

The brand name is a valuable asset that helps to match the quality and suggests an accurate knowledge structure associated with the brand (Srinivasan & Till, 2002). This means that brand name as an invaluable asset to their products and services, which can be the competitive advantage to their

organization (Safin *et al.*, 2016). For instance, the brand of smartphone available in the market includes Samsung, Apple, Xiaomi, Huawei, Vivo, and Oppo are mostly purchased by the customers (Trivedi & Raval, 2018).

In the research paper titled "The effect of familiar brand names on consumer behaviour: A Jordanian Perspective" which carried out by Khasawneh and Hasouneh (2010) revealed that the brand name of the product affects the consumer's product evaluation and affects their actual purchase intention. According to Azad and Safaei (2012), it opened that when customers are satisfied, they will have a word of mouth, which will lead others to interest and choose a brand. This can also be supported by other research done by Khasawneh and Hasouneh (2010), users generally prefer a widely recognized and accepted mobile phone brand. Based on study by Eze and Tan (2012), consumers will always choose a brand with a better image than a brand with a lower brand image.

In addition, Ruekert and Rao (1994) stated that one of the main goals of the brand name is to provide information about the quality of the product. It may reflect how consumers think, feel and behave about the brand (Lim *et al.*, 2013). For example, Apple has a higher brand image in the minds of consumers among various smartphone brands and consumers have always linked Apple to superior quality, trustworthiness, prestige, fashion and elegance (Ling, 2014). Thus, consumers are willing to pay high prices for brands because they believe that the brand is unique compared to other brands (Lee, Lee & Wu, 2011).

2.4 Product Price

According to Philip Kolter (2012), 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. This means that the amount of money that consumers are willing to pay for products or services that they consider as valuable. According to Ling (2014), price is an element of a stable marketing mix over a certain period of time, but sometime the price may increase or decrease suddenly and then become a single factor in sales revenue. Although the price is an element of a stable marketing mix, prices are also affected by volatility.

According to Pakola, Pietila, Svento and Karjaluoto (2003), the price of mobile phones is an important factor that many consumers consider when choosing a phone model. This statement supported by research done by Suki and Suki (2013) which argued that product prices significantly affect young college students' smartphone selection and purchase behaviour. This means that young customers will consider prices other than technological advancement when purchasing any mobile phone (Leppaniemi & Karjaluoto, 2005). Consumers will often look for low-priced brands or alternatives for optimal value (Swani, 2010).

Recently, price is no longer a negligible factor, whether or not it is a key factor affecting consumer behaviours in products and services (Mei Min *et al.*, 2009). However, the value of money varies from person to person. Some people may think that it is valuable for high prices, but others may think it is worthless (Lim *et al.*, 2013). For instance, when a consumer purchases a product, a set of acceptable price ranges is established. When the actual price of the product is above the acceptable price range, the intention to buy tends to decrease, and vice versa (Dodds, Monroe, & Grewal, 1991). If the price is seriously below the acceptable price range, consumers will lack of confidence in product quality (Peter, 1969). In contrast, if a smartphone provider can provide very good product features for a smartphone, even if the price is high, the user will still buy it (Lim *et al.*, 2013).

2.5 Social Influence

In this research, social influence means that one person intentionally or unintentionally causes another person to change their feelings, attitudes, thoughts and behaviours (Rashotte, 2012). According to Kotler and Armstrong (2010), consumers' action is being influenced by people surrounding them. It is due to the interaction with other people that know each other such as parents and peers. Thus, consumers will seek for the suggestion, advice as well as experience from people who have already purchased and used the smartphones (Safin *et al.*, 2016). They may tend to get it from different types of people, especially those close to them, such as friends, peers, family members and spouses. Prior research which carried out by Nelson and Mcleod (2005) found that consumers will be influenced by the media, parents and peers in order to purchase a smartphone.

According to Safin *et al.* (2016), nowadays, people can develop social networks online through social media such as Facebook, Twitter, and Instagram. They further found that people can also get the comments and products reviews from other users who currently or previously used the smartphones rather than just enable to find the information regarding smartphones. A study shows that advertising endorser also has a certain impact on consumers' intention to purchase (Chi, Yeh & Tsai, 2011). The result of this study indicated that celebrities could connect product value to customers by shifting their perception of a particular product. This is because those endorsers can have a strong influence on the recommendation, which in turn affects the consumer's choice and then directly increase the purchase intention of consumer (Trivedi & Raval, 2016). Thus, one factor that extremely influences consumer attitudes is a social influence (Anam, 2014).

2.6 Theory of Reasoned Action

Theory of Reasoned Action (TRA) emphasizes the fact that an individual's actual behaviour is driven by his/her behavioural intentions, and that behavioural intention is driven by the individual's attitude toward a particular product and the influence of subjective norms on actual behavioural performance. TRA holds that individuals experience the final purchase behaviour through a reasonable assessment of the alternatives and assess the expected performance beliefs in the attitude formation process. As mentioned earlier, Fishbein & Ajzen (1975) describe attitudes as a set of negative or positive attachments or feelings, and individuals have specific aspects of the environment about performing actual behaviour. The attitude formation process considers the evaluation of beliefs through the expectation model.

2.7 Theory of Planned Behaviour

Although the Theory of Reasoned Action (TRA) should be used to predict individuals' behaviour in voluntary situations, but the Theory of Planned Behaviour (TPB) is an extension of Reasoned Action Theory to consider mandatory situations. Ajzen adds a new perceptual behaviour control structure to his TPB model and defines it as how easy it is for individuals to perceive actual behaviour. Taylor (1995) further argues that perceived behavioural control is the perception of the individual's various internal and external constraints on the ultimate behaviour.

The TPB is similar to TRA, considering both the individual's rational decision making and the assessment of the alternative at hand to achieve the final behavioural decision. The assessment of perceived behavioural control is also done using an expectation model similar to the attitude formation process. Besides that, numerous researchers use TPB as a basic model to assess the acceptance of individual technologies at the individual level and whether they are willing to perform purchases for these technologies (Harrison, Mykytyn, & Riemenschneider, 1997; Mathieson, 1991; Taylor, 1995).

2.8 Hypothesis Development

This research examined the relationship between four independent variables, namely product features, brand name, product price and social influence, and the dependent variable, namely purchase

intention of smartphones among UTHM students. Thus, with this goal in mind and based on the past empirical studies, the following hypotheses are formulated:

H_1: There is a positive relationship between product features and purchase intention of smartphone among UTHM students.

H_2: There is a positive relationship between brand name and purchase intention of smartphone among UTHM students.

H_3: There is a positive relationship between product price and purchase intention of smartphone among UTHM students.

H_4: There is a positive relationship between social influence and purchase intention of smartphone among UTHM students.

2.9 Research Framework

Figure 1 shows the research framework of the relationships between product features, brand name, product price and social influence towards the purchase intention of smartphones among UTHM students.
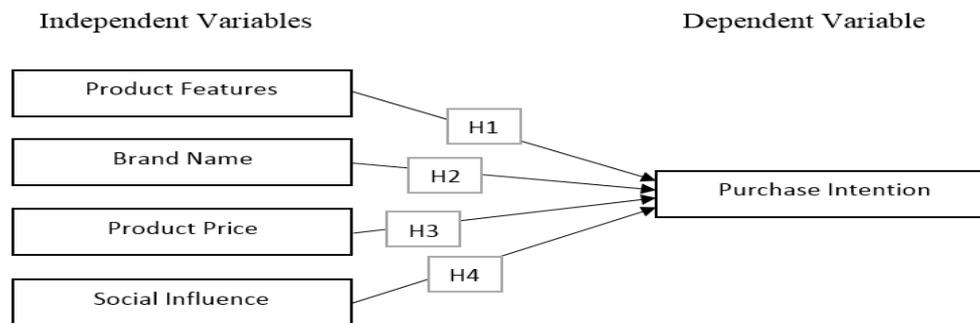

Figure 1: Research framework

3. Research Methodology

3.1 Research Design

In this research, quantitative method is used to collect the data. The researcher used the data collected to examine the relationship between independent variables and dependent variable. The researcher's goal in conducting quantitative research is to identify the relationship between product features, brand name, product price and social influence with purchase intention of smartphone among UTHM students.

3.2 Research Process

This research was started with finding the issue related to the customer's purchase intention of a smartphone to carry on the study. The subject areas that are related to the research have been identified. For doing this research, the information and the sources that are related to the topic has been searched and find. Second, the researcher finds the criteria for purchase intention of smartphone. After that, the researcher selects the best method to conduct this study. Next, the researcher performed the method, and the then run the analysis. For the last step is to report the result and make a conclusion. The research process is shown in Figure 2.
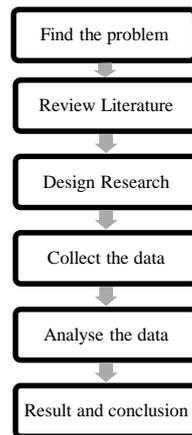
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┌─────────────────────┐
│   Find the problem   │
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│   Review Literature  │
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│   Design Research    │
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│   Collect the data   │
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│   Analyse the data   │
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┌─────────────────────┐
│ Result and conclusion│
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Figure 2: Flowchart of the research process

3.3 Data Collection Method

In research, data can usually be collected in one or more ways. Typically, there have two types of data which is primary data and secondary data. In this research, the researcher used one type of data collection methods which is primary data collection. Primary data were collected through distributing the survey questionnaire via online.

The primary data can be defined as the data that is observed or collected directly from the first-hand experience. In this research, the questionnaire survey method is the main data collection method as the main sources of information. It had been used to collect data from the respondents to conduct this research study on the factors that were influencing the purchasing intention of smartphones among UTHM students. 375 sets of questionnaires were distributed to the target population who were among the UTHM students. The respondents were required to answer all the 31 questions in the questionnaire.

3.4 Population and Sampling Techniques

The target population for this research is the undergraduate students in UTHM, which included the campus of Parit Raja and Pagoh. Based on the table by Krejcie and Morgan (1970), the sample size consisted of 375 respondents from the total population of 17,500. Therefore, 375 sets of questionnaires were distributed through the online Google Form survey method. Probability sampling technique were used in this research.

3.5 Pilot Test

The pilot test was conducted to obtain some indications such as reliability of measurements. This is because the pilot test is the process of measuring the reliability of the questionnaire before actual process being conducted to the respondents. This method could help to collect data accurately, reduce favouritism, improve data quality, and form valid and reliable measurement scales (Bougie, 2000). Thus, 30 questionnaire sample were distributed to the respondent via online Google Form.

3.6 Construct Measurement

The researcher adopted the questionnaires which were developed by Kaushal and Rakesh (2016), Mohd Suki (2013) and Shabrin *et al.* (2017), for the purpose of answering the research questions and as a tool in gathering primary data. In this research, there were 7 sections which included Section A, B, C, D, E, F and G. In section A, it consisted of the demographic profile of respondents including gender, age and education level. In section B, the questions were designed to retrieve from the respondents on their personal experiences using smartphone including their preferred type of operating system, price of smartphone, activities performed using smartphone, preferred news views on a smartphone and time

spent on smartphone within 24 hours. Meanwhile, in section C, D, E and F, the questions were designed to gather data from the respondents based on the independent variable namely product features, brand name, product price and social influence. Finally, in section G was the questions concerning the dependent variable which wass purchase intention. Additionally, the respondents were required to answer the items in section A and section B by using nominal scale, while for the items in section C until section G, the instrument used five-point Likert scale which ranged from 1 (strongly disagree) to 5 (strongly agree).

3.7 Data Analysis

IBM Statistical Package for Social Sciences (SPSS) were used to analyse the data. For the descriptive analysis, responses were tabulated and analysed in the form of percentage, mean and standard deviation. In order to make the comparison and test the hypotheses, inferential analysis such as Spearman's Correlation Analysis were used. Data analysis used in this research was descriptive analysis, scale measurement and inferential analysis.

4. Data Analysis and Results

4.1 Descriptive Analysis

Based on the sampling frame, a total of 375 respondents were involved in this research. Therefore, 375 questionnaires were distributed by using Google Form and 200 were returned and had been used for data analysis. The response rate of the questionnaire was 53.3%. The data were then analysed by using SPSS.

(a) Demographic Profile of the Respondents

Among 200 respondents involved in this research, 63 were male which consisted of 31.5%, and 137 were female which accounted for 68.5%. The percentage of Malay respondents was 47%, and Chinese was 38%. 12% were India and 3% were from other races. The respondent who were 18 to 20 years old was 30.5%. The ages from 21 to 23 carried the percentage of 56.5% and those age 24 years old and above was 13%.

Besides that, most of the respondents came from FPTP with 81 respondents (40.5%), followed by FPTV with a frequency of 34 respondents (17%). The third highest was from FKAAS which constituted of 13% or 26 respondents. The remaining 59 respondents (29.5%) were from FAST which was 4 respondents (2%), FKEE 21 respondents (10.5%), FKMP 14 respondents (7%), FSKTM 9 respondents (4.5%), FTK 7 respondents (3.5%) and Centre for Diploma Studies (PPD) 4 respondents (2%) respectively.

(b) Experience using Smartphone

For the preferred type of operating system currently using by the respondents, Android was the most preferred type of operating system which had the highest frequency of 14 from the total of 200 respondents with 71.5%. IOS was the second preferred operating system, which had 54 frequencies out of the total respondents and 27%. While OS Window and Blackberry had the least frequency as these types of operating system accounted for only have 2 (1%) and 1 (0.5%) of the total respectively. For the price that respondents spent on their smartphone, the percentage of the price below RM1500 was 56%, the price between RM1500 and RM2000 was 23%, the price between RM2001 and RM2500 was 6.5%, the price from RM2501 to RM3000 was 4.5% whereas the price which was RM3001 and above was accounted for 10%.

There were six types of activities performed using smartphone, which included social network, text messaging (SMS), map, GPS, playing games, official and documentation, and also listening to music. The percentage of social network was 90.5%, text messaging (SMS) 55.5%, Map or GPS 63.5%, playing games 59%, official and documentation 59.5%, and listening to music 69.5%. Based on the statistics, the majority of the respondents chose the Twitter and Facebook as the preferred choice, with approximately 58% (116 respondents), whereas the remaining 84 respondents chose the Google news or Yahoo new (30 or 15%), receive news alert on smartphone (4 or 2%), listen to audio news (12 or 6%) and watch news video (38 or 19%) as their preferred choice respectively.

For the time that the respondents spent on smartphone within 24 hours, there were 9% out of the 200 respondents spent 1 to 2 hours on their smartphone, 3 to 4 hours was accounted for 22.5% of the respondents, 30% of the respondents spent their time on their smartphone around 5 to 6 hours, and 38.5% of the respondents spent more than 6 hours on their smartphone..

(c) Normality Test

Normality test was used to determine whether a parametric test can be used or not. There were two tests which are Kolmogorov-Smirnov (K-S) test, and Shapiro-Wilk (S-W) test was designed to test the normality of the data by comparing the data to the normal distribution. This study used Kolmogorov-Smirnov test due to the number of respondents were 200. Based on Table 1, the data can be assumed as non-normal as the value of $p < 0.05$.

Table 1: Kolmogorov-Smirnov test

Dimensions	Statistic	df	Sifnigficant
Product Features	0.130	200	0.000 (Non-normal)
Brand Name	0.126	200	0.000 (Non-normal)
Product Price	0.115	200	0.000 (Non-normal)
Social Influence	0.165	200	0.000 (Non-normal)
Purchase Intention	0.118	200	0.000 (Non-normal)

Table 1 shows that the significant value for each dimension namely product features, brand name, product price, social influence and purchase intention were 0.000, which explained that all the data were non-normal. Hence, Spearman's rho was used in the correlation test.

(d) Reliability Test

Based on the reliability test analysis in Table 3, four independent variables namely product features (5 items), brand name (4 items), product price (4 items) and social influence (5 items) had respectively score of Cronbach's alpha 0.788, 0.701, 0.752 and 0.859. However, the Cronbach's alpha coefficient for the 5-items of purchase intention (dependent variable) was 0.711. If Cronbach's alpha value is 0.7 or above, the item analysis was considered satisfactory. According to Nunnally and Bernstein (1994), the value of Cronbach's alpha from 0.6-0.7 is at a medium intensity correlation level, 0.7-0.8 is considered as good, 0.8-0.9 is considered as very good while 0.9 and above is assumed as excellent. Hence, the reliability of the four independent variables for this study are at a good and very good level. For the dependent variable, the reliability scale has achieved good result.

Table 3: Descriptive statistics of reliability

Variables	Cronbach's Alpha
Product Features	0.788
Brand Name	0.701
Product Price	0.752
Social Influence	0.859
Purchase Intention	0.711

4.2 Hypothesis Testing

(a) Spearman's Correlation Analysis

According to Cooper and Schindler (2014), analysis of correlation is the analysis between two or more variables. For the purpose of this study, the correlation analysis was used to test whether there is a relationship between the independent variable and dependent variable. Spearman's rho used in this study because of the non-normal data. Referred to the "SPSS Correlation & Regression Guide", if the significant value is below 0.05, it means that the relationship between two variables chosen are related, however, if the significant value is above 0.05, it means that there is no relationship between two variables chosen. Table 4 shows the correlation coefficient size and the strength of the correlation.

Table 4: Spearman's rho

Hypothesis	Hypothesis	Correlation Rank (r)	Significant (p)
H1	Product Features	0.235 (4)	0.001
H2	Brand Name	0.269 (3)	0.000
H3	Product Price	0.365 (1)	0.000
H4	Social Influence	0.299 (2)	0.000
**Correlation is significant at the 0.01 level (2-tailed)			

From the analysis, it was discovered that there were significant relationships between all the variables and purchase intention. Product price found to have the moderate relationship with purchase intention ($r = 0.365$, $p < 0.01$), followed by the social influence ($r = 0.299$, $p < 0.01$), brand name ($r = 0.269$, $p < 0.01$) and lastly product features ($r = 0.235$, $p < 0.01$).

5. Discussion and Conclusion

5.1 Discussion of Major Findings

(a) Discussion for Objective 1

For this study, product features were based on the potential of the product that can stimulate the customers' purchase intention either positively or negatively towards smartphone. H_1 indicated that there was a positive relationship between product features and purchase intention of smartphone among UTHM students. The results showed that significant positive correlation coefficients between product features and purchase intention ($r = 0.235$, $p < 0.01$), demonstrating that H_1 was accepted. According to Hair *et al.* (2015), a rule of thumb has been proposed to characterize the strength of the association

between variables. The result indicated that the strength of association between product features and purchase intention was weak. These findings support the study by Safin *et al.* (2016).

(b) Discussion for Objective 2

The smartphone with the brand, which are more famous in the market are more likely to be purchased by the customers (Trivedi & Raval, 2016). H_2 indicated that there was a positive relationship between brand name and purchase intention of smartphone among UTHM students. The results showed that significant positive correlation coefficients between brand name and purchase intention ($r = 0.269$, $p < 0.01$), demonstrating that H_2 was accepted. Hence, the result indicated that the strength of association between brand name and purchase intention was weak. This result supports the previous findings. For instance, it supports the study conducted by Safin *et al.* (2016) who confirmed that brand name was significantly and positively related to purchase intention of smartphone.

(c) Discussion for Objective 3

Product price was described as the amount of money that charged for a product or the amount of money the customers must pay in order to acquire a product. H_3 indicated that there is a positive relationship between product price and purchase intention of smartphone among UTHM students. The results showed that significant positive correlation coefficients between product price and purchase intention ($r = 0.365$, $p < 0.01$), demonstrating that H_3 was accepted. The result indicated that the strength of association between product price and purchase intention was moderate. The findings support the previous studies as they found the pairs to have positive relationships (Rakid, 2019; Kaushal & Rakesh, 2016; Suki & Suki, 2013).

(d) Discussion for Objective 4

Social influence meant that someone's beliefs, preferences and behaviours may be influenced by the other's beliefs, preferences, and behaviours. H_4 indicated that there was a positive relationship between social influence and purchase intention of smartphone among UTHM students. The results showed that significant positive correlation coefficients between social influence and purchase intention ($r = 0.299$, $p < 0.01$), demonstrating that H_4 was accepted. The result indicated that the strength of association between social influence and purchase intention was weak. This result is supported and reaffirmed by several past studies (Safin *et al.*, 2016; Ibrahim *et al.*, 2014). A study on the dependency on smartphone and the impact on purchase behaviour which carried out by Ting *et al.* (2011) also found that social influence has a significant relationship of student's dependency on a smartphone.

5.2 Implications of Study

The findings of this study can provide extra literature on the topic of the intention of university students to purchase a smartphone and can be served as a guide or reference for the students or future researchers under similar studies. Besides that, the finding of this study can also provide some implications that might benefit the firms or manufacturers. Nowadays, the demand for the smartphone in the student's market is continuously increasing with various requirements. Through this study, the firms or manufacturers can better understand the preferences of the students on purchasing a smartphone. So, this can help manufacturers or application developers to make further improvements and strategize better marketing strategies with these appreciate information.

5.3 Conclusion

As a conclusion, the sole purpose of this research was to identify whether the four IVs (product features, brand name, product price and social influence) were significant to influence the DV (purchase intention). By referring to the results of the analysis, all the four IVs (product features, brand name, product price and social influence) have a positive relationship with the purchase intention. Among all

the IVs, the product price has a moderate association with purchase intention. However, the result indicated that product features, brand name and social influence have a weak association with the purchase intention. This can be concluded whether the correlation between IV and DV is moderate or weak, and they also have a positive correlation. Besides, this study also has implication to future academics and smartphone manufacturers. All the objectives achieved at the end of this research.

Acknowledgement

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