FACTORS AFFECTING PURCHASE BEHAVIOUR OF SMARTPHONE: A STUDY ON GEN Y IN UNIVERSITI PUTRA MALAYSIA (UPM)

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Abstract

Main purpose of this study was to investigate the factors affecting smartphone purchasing behaviour among Gen Y in Universiti Putra Malaysia. The factors studied were convenience, product features, social influence and brand. A total of 200 respondents participated in this study who were selected through a systematic random sampling method. Data were collected by using a self-administrated questionnaire. The Pearson correlation analysis showed that all the factors significantly influenced the smartphone purchasing behaviour among Gen Y in UPM. Meanwhile, multiple regression results indicated that product features was the strongest predictor. These findings suggested that marketers should create a suitable business plan and attractive advertisement to increase university students' smartphone purchases. In addition, future research was recommended to investigate other factors that affected smartphone purchasing behaviour among universities, mainly to gauge a more comprehensive view of Gen Y's purchasing behaviour.

Keywords: Smartphone purchasing behaviour; Gen Y; Product features; Social influence

Abstrak

Tujuan utama kajian ini adalah untuk mengkaji faktor yang mempengaruhi gelagat pembelian telefon pintar dalam kalangan generasi Y di UPM, Serdang. Faktor yang dikaji ialah kemudahan, ciri produk, pengaruh sosial dan jenama. Sejumlah 200 orang responden telah menyertai kajian ini, yang dipilih melalui kaedah persampelan sistematik. Data telah dikumpulkan menggunakan borang soal selidik ditadbir sendiri. Analisis korelasi Pearson menunjukkan bahawa semua faktor secara signifikan mempengaruhi tingkah laku pembelian telefon pintar dalam kalangan Gen Y di UPM, sementara hasil regresi berganda kemudiannya menunjukkan faktor ciri fizikal produk merupakan penyumbang terkuat. Dapatan kajian ini mencadangkan bahawa pemasar perlu membentuk pelan perniagaan yang sesuai dan iklan yang menarik untuk meningkatkan pembelian telefon pintar dalam kalangan pelajar universiti.

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Tambahan, kajian masa depan dicadangkan supaya mengkaji faktor-faktor lain yang boleh mempengaruhi gelagat pembelian telefon pintar dalam kalangan pelajar universiti, terutamanya untuk mendapat gambaran yang lebih komprehensif mengenai tingkah laku pembelian Gen Y.

Kata kunci: Tingkah laku pembelian telefon pintar; Gen Y; Ciri-ciri produk; Pengaruh sosial

Introduction

In recent years, the evolution of technology has made smartphones very popular among consumers, especially students, because of their various features, which are not available on a mobile phone (Chan, Narasuraman, Abdul Aziz, Syed Mustafa, & Cheong, 2021; Kaushal & Rakesh, 2015). Nowadays, users use smartphones for making calls and sending messages and connecting users to social media portals such as Facebook, Instagram, and Twitter (Kaushal & Rakesh, 2015). Apart from that, a smartphone is a communication tool that allows users to communicate with each other and convey the message around the world (Gladden, 2018) and make online purchases.

Montag *et al.* (2015) stated that the smartphone is an essential communication tool in daily human life as it can, directly and indirectly, influence human relationships and interaction. This has shown that the mobile phone has not only become an essential tool for communication, but it has intergraded to become a vital part of every society, which increased the number of users worldwide (Gadzama, Joseph, & Aduwamai, 2019). According to Canalys (2021), smartphone users are forecast to grow worldwide and have caused smartphone sales to increase. Worldwide smartphone sales are expected to increase 12 percent in 2021, which is to regain the fallen sales of 7% from the previous year of 2020 due to the COVID-19 pandemic (Canalys, 2021). However, the percentage of daily usage of smartphone devices among college students for their school works was only 37 percent in 2015, a relatively small percentage compared to 72 percent of the laptop usage (Harris, 2013). Therefore, it showed that college students prefer to use laptops to do their work rather than smartphones. Thus, it can be seen that the popularity of smartphones is high. However, there is also a market segment that still prefers laptops, which leads us to require further investigation on the purchasing behaviours among Gen Y. Furthermore, the ownership of the smartphone among the students does not have any relationship with the skill of using a smartphone (Chen, Seilhamer, Bennett, & Bauer, 2016). Thus, it is critical for consumers to fully understand the factors that affect their purchasing behaviour towards the smartphone.

Many studies have concentrated on smartphone usage worldwide (e.g., Chan *et al.*, 2021; Gadzama *et al.*, 2019: Gladden, 2018; Çelik, Eygü, & Oktay, 2015). However,

for a more accurate and detailed analysis, there is a need for a closer examination of the smartphones purchasing behaviour in specific countries. For example, considering that the usage of smartphones is growing exponentially, Lee (2014) mentions that Malaysia can lead the world in smartphone usage. Therefore, it is essential to know about consumers' purchasing behaviour towards smartphones and the factors that influenced their purchasing behaviour (Lazim & Sasitharan, 2015).

The number of smartphone users in Malaysia has increased, and the number of Gen Y smartphone users increased as well (Marmaya *et al.*, 2019). According to Al-Barashdi, Bouazza, and Jabur (2015), one of the largest and important target markets and the most active users of smartphones are university students, and they are generally the Gen Y (Enterprise News, 2011). The number of smartphone users increased rapidly because consumers have a high need for convenience where they can use their smartphones at any place (Genova, 2010). Besides that, friends and family members are often seen as social influences that encourage consumers to buy a smartphone (Kim & Shin, 2016). In addition, consumers have a different level of knowledge and attitude, which can influence them to act and behave differently. Also, social factors such as family, friends, roles and status and personal factors played vital roles in influencing consumer buying behaviour (Mohan, 2014). Meanwhile, smartphone users lacked the consideration of the brand when they bought the product (Lim, Han, & Chan, 2013). Therefore, the various environmental factor and unique purchasing behaviour are required to be further understood.

According to Vogels (2019), their adoption and use of technology largely hold true today. Smartphones have become an essential communication tool in their life. In fact, in today's society, people have become highly dependent on smartphones to retrieve helpful information with a simple browse and click to get access on their smartphone (Genova, 2010). Therefore, social influence is often seen as a strong influence that affects the consumers' behaviour on smartphones (Kim & Shin, 2016). Previous studies showed that consumers might listen and believe in the different social groups while they want to decide on selecting a smartphone (Lim *et al.*, 2013). Due to this issue, the social group easily influence the consumer in selecting a smartphone. Hence, this study enhances a better understanding regarding the social influence that affects smartphone purchasing behaviour among Gen Y.

Other than that, product features are one of the factors that may influence consumer purchasing behaviour towards smartphones (Saif, Razzaq, Amad, & Gul, 2012). However, different smartphone brands and models offer different product features. For example, the Sony Xperia Z series smartphone offers incredible useful features and waterproofing (McCraken, 2013), whereas Samsung smartphones offer a high aperture of the rear camera (Donovan, 2015). This could make consumers have difficulty deciding when purchasing a smartphone due to the needs and wants of consumers towards smartphones.

According to Mullen and Kwon (2016), the Samsung smartphone battery cell issue caused 2.5 million Samsung galaxy note 7 to be recalled immediately. Briden (2017) indicated that overheating and the draining of Samsung smartphones' batteries happen because smartphones get easily hot during calls. Thus, this issue causes consumers to lose their confidence in the Smartphone brand (Chow, Chen, Yeow, & Wong, 2012). Therefore, it is necessary to investigate the relationship between smartphone purchasing behaviour and brand among university students in Universiti Putra Malaysia. Thus, it can help consumers to make wise decisions while purchasing a smartphone brand.

Literature Review

Purchasing behaviour of smartphone

According to Statista (2021), purchasing smartphones has been considered arising due to the growth of the technology in Malaysia and increasing consumers' awareness to have a smartphone. In Malaysia, Lazim and Sasitharan (2015) analysed the factor which persuades Malaysian consumers to purchase a smartphone. Their results indicated that 85 per cent of Malaysian smartphone users agreed that a large screen, high internet speed and long battery power are the essential factors that influenced their purchasing intention towards a smartphone. Malaysian smartphone users will increase their purchasing of a smartphone to make their life easier with multipurpose features. Similarly, this is supported by Sujata, Yatin, Abhijit, Noopur and Ruchi (2016)'s study, which found that these characteristics could encourage consumers to purchase a smartphone in general. In the meantime, different characteristics of smartphone features available in the market nowadays created multiple choices and intentions among smartphone users in adopting various types of a smartphone available (Kang, Cho & Lee, 2011). Various characteristics of a smartphone can increase smartphone purchasing intention towards different smartphone products. Overall, both findings showed that product features have a positive impact on smartphone purchasing behaviour.

Factors influencing smartphone purchasing behavior

The previous studies indicate that smartphone purchasing behaviour is influenced by convenience (Shabrin, Swinburne, Abul Kashem, Chan, & Susila, 2017; Norazah, 2013; Genova, 2010), social influence (Shabrin *et al.,* 2017; Kim & Shin, 2016; Mohan, 2014; Lim *et al.*, 2013), product features (Shabrin *et al.,* 2017; Saif *et al.*, 2012), and brand of the smartphone (Shabrin *et al.,* 2017; Chow *et al.,* 2012). Many studies have found that the convenience of a smartphone positively impacts smartphone purchasing behaviour (e.g., Shabrin *et al.*, 2017; Norazah, 2013; Genova, 2010; Holub, Green, & Valenti, 2010). Smartphones enable users to check email, make appointments and maintain a calendar. Besides, younger consumers

have started to use smartphones to handle numerous tasks. Therefore, the convenience of the smartphone help consumer increases their productivity and efficiency in doing the tasks (Holub *et al*., 2010).

Smartphone apps' different operations and functions are prevalent among consumers, especially undergraduate students and young professionals. This is because it is like a mini-computer that provided many functions and help them solve their problem. Moreover, it is small and can easily be used in any way and anytime. Çelik *et al*., (2015) investigated smartphone apps and the design of smartphone influence consumer purchasing decision. Their finding showed that 46% of the respondents agreed that smartphone apps affect their purchasing decision. However, 39% of the respondents agreed they would consider the smartphone's design when purchasing. They suggest that a smartphone should have an attractive design to encourage the buyer to purchase a smartphone.

In addition, Osman, Sabudin, Osman, and Tan (2011) point out the benefit of using a smartphone compared to a computer. He indicated that a smartphone offered advanced computing power and connectivity, a handheld computer that is powerful enough to deliver various functionalities comparable to a computer. Previous studies also found that information workers transfer activities and tasks between devices (PC and Smartphone) of vastly different capabilities. Some would use their smartphone to work as a primary device compared to a PC. Therefore, their finding points out that many people switch computers to smartphones because their functions are similar.

Past studies also found that consumer purchasing behaviour is influenced by social factors, including family, friends, social roles, and social status. Social influence always comes from parents, peer pressure and social media as it direct and indirect influence consumer purchasing decision. Besides, consumers readily agree and accept the point of view of their friends and relatives. Therefore, the chances to indirectly promote the products to the family members are high, and it can help the consumers decide whether to buy or not to buy the product.

Social value is the learned connection between an individual favourable and unfavourable evaluation of an object. A consumer who is more favourable to social value will increase their purchase behaviour. Xie and Chaipoopirutana (2014) found that consumers achieve favourable social value, and more customers would like to purchase Xiaomi smartphones. This finding is argued by Haverila (2011), who stated smartphones could be definitely linked to having negative behavioural aspects. Social networking on smartphones was observed as one of the primary triggers of smartphone dependency among a wide variety of tasks.

The market trend in society is an essential factor that influences consumer purchasing decisions on a smartphone (Osman, Talib, Sanusi, Tan & Alwi, 2012).

Their finding shows that smartphone is not merely a commodity to fulfil the communication requirements, but smartphones would be an indicator of status, prestige, and lifestyle. For instance, iPhone buyers motivated by market trends are easily influenced by their friends and colleagues' purchases for status instead of the need for such applications, functions, and features. Thus, social influence may purposely cause people to change their attitudes, behaviours, and feelings. These conditions are more apparent when most individuals hold a particular thought, attitude, feeling, or behaviour (Rashotte, 2007).

Nevertheless, an interesting result shows that trends in society and purchasing behaviour have a negative relationship (Saif *et al*., 2012). The research is carried out in Pakistan. Pakistan consumers do not think they will follow the trend of buying an expensive phone to increase their social status. Thus, the trend in society is not seen as a social influencer that affects consumer purchasing decisions.

In addition, peers and parents are considered essential social influence factors to increase and encourage high smartphone demand (Auter, 2007). Lim *et al*. (2013) found that social influence such as friends, family and spouse will encourage Gen Y to purchase a smartphone. This is supported by Suki and Suki (2013) which found that social influence plays a vital role, and it is the most influential students to purchase a smartphone. Ernest, Moshin and Chung (2010) found that celebrities were not affecting respondents to purchase a smartphone. Nevertheless, Run, Mohsin and Chung (2010) indicated that celebrities have a more significant influence than parents. The influences of other factors such as social class, culture and subculture are essential to affect consumer appraisal and use of products (Schiffman & Wisenblit, 2015). Apart from that, Nagarkoti (2009) found that parents and peers did not influence the consumer. He found that parents do not influence Finnish consumers because only a few smartphone brands are available.

As for another factor understudy, i.e., product features, refers to an attribute of a product to meet the satisfaction level of consumers' needs and want through owning the product, usage, and utilisation of a product (Kotler & Armstrong, 2018). It is challenging for consumers to make a purchasing decision when considering the product features of a smartphone. They may mentally link related product features to simplify the decision-making process because various smartphone brands have different product features in the market.

However, this is not supported by Çelik *et al*. (2015) which investigated the impact of recent innovative features of their smartphone on their young consumer purchase behaviour. The result showed that product feature is a dominant factor considered by the consumers while selecting a smartphone. Similarly, previous studies proved that smartphone features such as built-in camera, larger memory capacity, multimedia, design and styling, colour screen, price, quality, reliability, after-sales service and

latest features would affect consumer decision choice towards a smartphone (Saif *et al.,* 2012; Mokhlis & Yaakop, 2012; Kumar & Chaubey, 2015).

Product features of the smartphone were found to make the purchase process of the smartphone getting more intense and affected their repeat purchase intention on the smartphone. Goh, Jiang, Faiz, Hak, and Tee (2016) examine the product features that affect repeat purchase intention among Malaysians; product attributes are considered a primary prediction index. Repeat purchase intention mainly stems from objective entities of the smartphone rather than consumer satisfaction (subjective perception). This finding is distinct from previous literature stating that consumers typically have a higher intention to repurchase products with satisfied product features and a joyful post-purchase experience. Overall, their finding found that product features are an important factor a consumer considers when purchasing a smartphone.

Mokhlis and Yaakop (2012) found that to increase smartphone purchase behaviour, it is necessary to improve product features such as phone size, colour, materials, button shape, and interface features. This is due to the smartphone's design providing the first impression to the consumer and thus attract them to purchase a smartphone. Nevertheless, this is argued by Osman *et al.* (2012), which showed that the smartphone's design does not significantly impact the consumer purchasing decision. He points out that those consumers consider other factors rather than the product features of a smartphone.

The brand name of the product will also influence the evaluation of consumers and subsequently affect the buying decision (Khasawneh & Hasouneh, 2010). Brand name enables consumers to compare the product to others attributes such as price, quality, experience and design. Besides, branding help consumers to save time searching for information about a product they wish to purchase as they can immediately construct the product information using brand names. However, Azikiwe (2016) found that the brand name does not significantly affect the purchase behaviour of a smartphone among young adults. Nigerian consumers are not concerned about the brand name while purchasing a smartphone. They are more concerned about the aesthetic value and price of the smartphone rather than the brand of the smartphone. Also, the research found that consumers who are from the lower-income group have a more significant impact on brand toward their behaviour due to after-sales service and limited purchasing capacity (Lim *et al.,* 2013).

Nevertheless, more than half of respondents (53.3%) strongly agreed to choose a brand due to perceived good brand quality (Farzana, 2012). Therefore, it shows that brands could influence purchase decisions. Therefore, it should further look into the effect of brand awareness, brand equity, brand loyalty, and brand image on the purchase decision.

Sharif (2017) examined the relationship between brand loyalties that would lead to the consumer's purchasing of mobile phones. If the customer already trusts one particular brand name, they would continuously buy the same brand for the next purchase, better described as loyalty. They were loyal to that brand and found it hard to turn to another brand for their satisfaction with mobile phones. Under the influence of brand loyalty, consumers would continue to buy the brand, regardless of its competitors' superior features, prices, or convenience.

From the discussions over past literature reviews, it was found that convenience, social influence, product features and brand were raised as factors that would affect consumers purchase behaviour on smartphones. Thus, there is a need to determine how these factors can affect smartphone purchasing behaviour among universities, particularly UPM students.

Methodology

In this study, a correlational research design was used to determine the relationship between four independent variables (convenience, social influence, product features and brand) and the dependent variable (purchasing behaviour of a smartphone). In particular, a "survey" approach was adopted in a questionnaire as the instrument for data collection. The data were collected from direct interaction with the participants and enquiry by listing a few questions on paper.

This study was conducted in the main library of Universiti Putra Malaysia, Serdang, as it gathered students from different faculties. From these different faculties, it enrolled to a different course of students, and thus it would have represented the whole student's population at UPM. Besides that, this research location was considered as appropriate where most of the respondents were between 20 to 30 years old (Gen Y). Therefore, it could help to provide more reliable and convincing results for the study.

The systematic sampling method was adopted by selecting a random starting point and then picking up every n^{th} respondent entering the Universiti Putra Malaysia library. Before giving out the questionnaire, respondents answered a vital screening question to ensure that they were smartphone users and that they would be eligible to participate in the study's survey. Then, every third respondent who entered the library will be selected. Overall, 200 respondents participated in this study. The advantage of using a systematic sampling method is because it is easy to draw a sample and help to minimise errors when conducting research. In addition, the cost required was low, and the selection process was simple. Furthermore, the systematic sample is precise in estimation and more representative of the population (Benedetti, Espa, & Taufer, 2017). Therefore, this study used the systematic sampling method to conduct the research.

The questionnaire as the study's instrument was in the form of a set of a self-administered questionnaires. It was designed in the English version, and it consists of a cover page, and the contents were divided into three sections. Section A (I) was about the social demographic profile of the respondents. This section consists of gender, ethnicity, occupation, income level and marital status. In Section A (II), the pattern of smartphone purchasing behaviour was discussed in more detail, and this section consists of four questions. Section B then aimed to determine four independent variables that affected smartphone purchasing behaviour: convenience, social influence, product features, and brand. It consists of four parts with a total 34 of items. In particular, five items were used to measure convenience, ten items to measure the social influence, nine items for measuring product features and ten items to determine the relationship between brand and smartphone purchasing behaviour.

Finally, Section C determined smartphone purchasing behaviour among Gen Y in UPM. This section consists of ten items. All the independent and dependent variables were adopted using a five-point Likert scale, and the adopted sources are as tabulated in Table 1 below. Based on the current study's pre-test, all the items were highly reliable as the Cronbach alpha obtained was above 0.800 (Sekaran, 2003).

Table 1: Sources of Measurement Items

Variables	Items	Sources	Reliability
Convenience	5	Suki and Suki (2013)	0.872
Social Influence	10	Huang, Cheng, Lum, & Tan (2013) Suki and Suki (2013) Sohail & Tanveer (2015)	0.934
Product Features	9	Huang *et al*. (2013) Suki & Suki (2013)	0.887
Brand	10	Huang *et al*. (2013) Sainy (2014) Ling, Lang, Fong, & Perinpajothi (2014)	0.872
Smartphone Purchasing Behaviour	6	Suki and Suki (2013) Chow *et al*. (2012) Sainy (2014) Ling *et al*. (2014)	0.861

Descriptive statistic was used to describe and summarizes the respondent's social demographic profile which consists of (gender, age, ethnic, occupation, income level and marital status) and pattern of smartphone usage behaviour. Meanwhile, Pearson-correlation product moment was used to analyse the hypotheses involved in the

relationship between independent variables (smartphone purchasing behaviour) and dependent variables (convenience, social influence, product features and brand). Finally, multivariate regression analysis was applied to analyse the simultaneous relationship among the variables and determined the strongest predictor for smartphone purchasing behaviour. In short, this type of analysis was used to identify the most influential factor that affected smartphone purchasing behaviour through its beta value (β- the greater the beta value, the more significant the impact of the predictor variable to the dependent variable.

Findings and Discussion

Socio-demographic background of respondents

In this section, respondents' demographic characteristics were examined in the aspect of gender, age, ethnicity, occupation, income level, and marital status, as shown in Table 2.

Table 2: Demographic Characteristic of Respondents

Items	Frequency	Percentage
Gender		
Male	36	18.0
Female	164	82.0
Age (years old)		
18-20	82	41.0
21-25	102	51.0
26-30	10	5.0
Above 30	6	3.0
Ethnic		
Chinese	71	35.5
Indian	11	5.5
Malay	110	55
Others	8	4
Income level/ Allowance		
RM0- RM1,000	177	88.5
RM1,000- RM2,000	9	4.5
RM2,001-RM3,000	7	3.5
Above RM3,000	7	3.5
Marital Status		
Single	191	95.5
Married	9	4.5
Divorce	0	0

Table 2 showed that female respondents accounted for 82.0 percent, whereas male respondents accounted for 18 percent of the total respondents. This was because the majority of the UPM students were female. In terms of ethnicity, the majority of the respondents were Malay (55.0%), followed by Chinese (35.5%) and Indian (5.5%). Besides that, there was a small portion of the other ethnic which was (4.0%). Again, this could be due to the majority of UPM students were Malay.

The source of income of the respondents primarily depends on PTPTN loan/scholarship and pocket money from their parents. In this study, the majority of the respondents (88.5%) received monthly income, which accounted for RM0 to RM1000. Therefore, they had lower monthly income, which was accounted for 88.5 percent of the sample population. In addition, only 4.5 percent of the respondents received a monthly income of RM1000 to RM2000. Likewise, 3.5 percent of the respondents received monthly income, RM2001 to RM3000. This meant that only a small portion of respondents had a higher income.

Regarding marital status, this study found that the majority of the respondents (95.5%) were still single, followed by (4.5%) of the respondents who were married, and none of the respondents was divorce. This result proposed that most of the students were still studying, and this was not the time for them to get married yet.

Patterns of smartphone usage behaviour

Patterns of smartphone purchasing behaviour have been discussed, and the findings are shown in Table 3. The results represented the brand of the smartphone in use, source of smartphone information, reasons for choosing the current smartphone, and the most liked features in the current smartphone.

Table 3: Patterns of Smartphone Usage Behaviour

Items	Frequency	Percentage (%)
Brand of the smartphone in use		
Samsung	111	55.5
HTC	5	2.5
Apple	39	19.5
Blackberry	2	1.0
Nokia	2	1.0
Sony	14	7.0
LG	1	0.5
Motorola	0	0
Xiao Mi	13	6.5
Lenovo	29	14.5

Table 3 (continues)

Items	Frequency	Percentage (%)
Source of smartphone information		
TV/Radio	80	40
Family/Friends	132	66
Magazine/Newspaper	53	26.5
Promotion	84	42.0
Social Media (Facebook, Twitter, YouTube, Google +)	113	56.5
Blog	24	12.0
Internet	130	65.0
Others	16	8.0
Reasons for choosing current smartphone		
Price	126	63
Brand	117	58.5
Operating System	102	51.0
Colour	21	10.5
Battery life	26	13.0
Screen size	46	23.0
Application	48	24.0
Specifications (Weight/ Width/ Length)	33	16.5
Features	56	28.0
Capacity	24	12.0
Most liked features in current smartphone		
Brand	116	58.0
Operating System	134	67.0
Colour	45	22.5
Battery Life	63	31.5
Screen Size	65	32.5
Application	112	56.0
Specifications (Weight/Width/Length)	64	32.0

Approximately 55.5 percent of the respondents chose the Samsung smartphone brand because the design was trendy and the price was reasonable. Therefore, many students use the Samsung smartphone brand. In contrast, among the respondents, none of them chose the Motorola smartphone brand because there was no Motorola advertisement on the media, and the model is also limited in the market nowadays. Therefore, respondents might not be familiar with and interested in buying the Motorola smartphone.

Regarding the source of smartphone information, 66.0 percent of the respondents responded that they received the smartphone information through family and friends. Besides that, more than half of the respondents (56.5%) admitted that they obtain

smartphone information from social media. In addition, price (63.0%), brand (58.5%) and operating system (51.0%) were the three main reasons considered by the respondents when chose a smartphone.

Overall, respondents are more likely to use the Samsung smartphone brand. Respondents responded that they got the source of smartphone information from family, social media and the internet. In addition, they would also consider the price, brand and operate system of smartphones in the current smartphone. Apart from that, among all the product features, they were more concerned about operating system, brand and application when chose a smartphone.

Analyses on the factors influencing smartphone purchasing behavior

There were four null hypotheses tested in this study by using the Pearson correlation test. The result is shown in Table 4.

Table 4: Results of Pearson Product-Moment Correlation Coefficient

Hypotheses	Pearson correlation (r-value)	Significant (p-value)
Ha1: There is a significant relationship between convenience and smartphone purchasing behaviour among Gen Y in UPM, Serdang	.426**	0.000
Ha2: There is a significant relationship between social influence and smartphone purchasing behaviour among Gen Y in UPM, Serdang	.310**	0.000
Ha3: There is a significant relationship between product features and smartphone purchasing behaviour among Gen Y in UPM, Serdang	.616**	0.000
Ha4: There is a significant relationship between brand and smartphone purchasing behaviour among Gen Y in UPM, Serdang	.411**	0.000

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

The result showed a significant relationship between convenience and smartphone purchasing behaviour (r = 0.426; p = 0.000). Thus, the first hypothesis, Ha1, was supported. The positive sign of the correlation revealed that the higher the convenience of the smartphone, the higher the tendency to affect smartphone purchasing of the respondents. The convenience of the smartphone was found as an important consideration among the UPM students when they want to purchase a smartphone and thus will influence their smartphone purchasing behaviour. This current finding was consistent with previous research findings, which implied that the convenience of the smartphone would affect consumer smartphone purchasing

behaviour. Therefore, this showed that the convenience of a smartphone is positively correlated with smartphone purchasing behaviour (Holub *et al*., 2010).

For the variable of social influence, the finding expressed a positive relationship between social influence and smartphone purchasing behaviour (r = 0.310; p = 0.000). The positive relationship illustrated that the greater the influence of social influence, the higher the purchase behaviour of the respondents to buy a smartphone. As a result of this, the second hypothesis, Ha2, was supported. This result seemed to be consistent with the previous research, which revealed that the influence of social groups would lead to smartphone purchasing behaviour, in which respondents were more likely to purchase a smartphone when influenced by friends and family members (Lim *et al*., 2013).

Next, the table also demonstrated a significant relationship between product features and smartphone purchasing behaviour (r = 0.616; p = 0.000). This finding described that if the product features of the smartphone were high, the smartphone purchasing behaviour among Gen Y also would be high. Thus, the third hypothesis, Ha3, was successfully supported. Therefore, product features play a vital role in the purchase decision of smartphones. With this, consumers must understand the product features of smartphones such as phone size, colour, material, and others before making a purchase decision on a smartphone. This finding was supported by the previous research, which indicated that product features were considered a primary factor affecting repeat purchase intention among Malaysians (Goh *et al*., 2016).

In addition, the result disclosed that the correlation coefficient for the brand and smartphone purchasing behaviour r-value was 0.411, and the p-value was 0.000. This proved there was a significant relationship between the brand and smartphone purchasing behaviour. Henceforth, the fourth hypothesis, Ha4, was supported. These pointed out that most of the respondents were tend to choose trustworthy smartphone brands. Thokchom (2011) verified that people would buy the smartphone only when they trust the smartphone brand. However, the consumers still considered many factors: brand image, brand equity, and brand loyalty.

In conclusion, product features were strongly associated with smartphone purchasing behaviour, and the relationship was (r = 0.616). It is followed by convenience (r = 0.426), brand (r = 0.411) and social influence (r = 0.310). Next, the regression coefficient for convenience, social influence, product features and brand will be tested.

Table 5 summarizes the result of multiple regressions for smartphone purchasing behaviour. Again, all the variables (convenience, social influence, product features and brand) related to smartphone purchasing behaviour were tested.

Table 5: Summary of Multiple Regression Analysis

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	2673.815	4	668.454	39.227	.000[b]
Residual	3322.965	195	17.041		
Total	5996.780	199			
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.668[a]	.446	.435	4.12806	
Variable	β	Std. Error	T	P	
Convenience	0.248	0.111	2.229	0.027	
Social Influence	0.070	0.054	1.307	0.193	
Product Features	0.536	0.070	7.628	0.000	
Brand	0.152	0.056	2.701	0.008	

Notes: Dependent Variable: Smartphone Purchasing Behaviour
Predictors: Convenience, Social Influence, Product Features, Brand

Based on the result, the multiple regression model was statistically significant with the F-value = 39.227, significant at p-value = 0.000. This indicated that the model applied in multiple regression could significantly predict the dependent variable, smartphone purchasing behaviour. In addition, the value of R-square was 0.446, which indicated that the smartphone purchasing behaviour of UPM students was 44.6 percent influenced by the factors of convenience, social influence, product features and brand. Therefore, convenience, social influence, product features, and brand were significant predictors of smartphone purchasing behaviour. The remaining 55.5 percent of the model is represented by the other factors which would affect smartphone purchasing behaviour.

The results showed that the four predictors had a significant relationship with smartphone purchasing behaviour. Product features had the most significant impact on smartphone purchasing behaviour because they had a higher beta value of 0.536. Mokhlis and Yaakop (2012) revealed that the smartphone's design would provide the first impression to the consumer and attract them to purchase a smartphone. Hence, this study supported this finding that university respondents would be more

concerned about the product features of a smartphone rather than social influence, convenience and brand. Besides that, this study indicated that social influence was least influential towards smartphone purchasing behaviour which obtained a beta value of 0.070. It indicated that the smartphone purchase behaviour of UPM students would increase 0.070 units only when social influence on smartphone purchase behaviour increased 1 unit while others remain. This result found that social influence was not an essential factor affecting university students' smartphone purchase behaviour.

Conclusion

In a nutshell, a smartphone is an essential communication tool for every individual in their life. Respondents must understand how to use the smartphone properly to make online banking, email, or buy the product on the website. This study found that respondents were concern about the attributes and features of a smartphone. If the smartphone provides various outstanding features and is designed unique compared to other smartphones, consumers will intend to purchase the smartphone with more features and perform outstandingly. Therefore, this showed that they would prioritise the smartphone features rather than follow the purchasing behaviour of their friend and family members and social influence.

Another factor that affected respondents purchase behaviour was the convenience factor. However, this study found that convenience was not seen as an essential factor considered by respondents when purchasing a smartphone. Nevertheless, smartphones were considered an essential item to make their life easier. Indeed, smartphones have made people became smarter as they can search the worldwide information at their fingertips. Moreover, smartphones help us settle daily tasks and build good connections around the world. Lastly, consumers, marketers and future researchers must understand the factors that affect consumer smartphone purchasing behaviour.

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