

FACTORS INFLUENCING PURCHASING INTENTION OF SMARTPHONE BRAND: A STUDY ON FEMALE STUDENTS IN UNIVERSITY MALAYSIA PERLIS (UNIMAP)

Nurizzah binti Ahmad, Haslina binti Hassan Basri and Aidanazima binti Abashah
School of Business Innovation and Technepreneurship, Universiti Malaysia Perlis, Kangar,
Perlis, Malaysia

Abstract: The purpose of this paper is to investigate the factors that influence the purchase intention of smartphone among female university students in University Malaysia Perlis. Mobile communication has made an impact towards interaction between people while conducting business either locally or internationally. The expansion of mobile communication technology such as wireless internet, mobile phone and Global Positioning System (GPS) are constantly evolving and upgrading and it will affect the result of consumers' changing needs and preferences. As a result, this research has carried out to identify the factors influencing purchasing intention of smartphone among female students in University Malaysia Perlis (UniMAP). This study investigates the relationship between brand image, price, product features, peer group and purchase intention towards smartphone brands. This survey was conducted by distributing questionnaires and the data was run using SPSS. The result shows that there is a positive and significant relationship among all the independent variables and all hypothesis is accepted. Based on these results, it seems that the smartphone company needs to enhance their product with affordable price and develop marketing strategy to attract consumer especially female consumers as they play an important role in purchasing power and increase purchase intention.

Key words: *Brand Image; Price; Product Features; Peer Group; Purchase Intention*

1. INTRODUCTION

Mobile phones are used as a communication tool for voice and data. Due to the increasingly innovative sophistication of the technology, users by using smartphones can access the internet and perform various tasks that make efficient personal and professional life. The smartphone gadget has undeniably greatly influenced by the way people manage their day-today affairs. The rapid growth of international and global trade business, while advances in ecommerce and technology have changed the way of customers do things. An integral part of human life activities has been inserted in the mobile phone applications as it plays a predominant role in today's modern life. According to Falayi & Adedokun [1], smartphone popularity increases every day at all levels, mostly among university students to the extent that it's dependency is associated with student anxiety [2] New smartphone model is introduced and launched on the market almost every year because of the vast technology improvements. Smartphone brand shows an

important role in affecting the intention of consumers to buy. Consumers now pay greater attention to the brand while selecting a smartphone, [3]. With time and increasing demand the smartphones industry has also develop gradually. In 2019, the number of mobile subscriptions was estimated at 8.3 billion worldwide up from 7.9 billion in 2018.[4]

Almost every activity today has for it a smartphone app [5]. The number of famous smartphone brands include Apple, Samsung, Sony, Asus, Huawei, Xiaomi and others have entered Malaysia. While males are more likely to own smartphones than females, brand has had more impact on females [6] and younger consumer segments are becoming one of Malaysia's most important smartphone market segments. [7]

This research focuses on the purchase intention processes of female students which is generation Y, in the University Malaysia Perlis region of the state of Perlis in Malaysia. The researchers focus on four factors that affect the purchase intention of

Corresponding Haslina binti Hassan Basri, School of Business Innovation and Technepreneurship, Universiti Malaysia Perlis, Kangar, Perlis, Malaysia

smartphone in that are brand, pricing, product features and peer influence. With an accurate understanding of the pattern of young female buying intention towards smartphone brand, firms can market their products in the marketplace on the basis of their choice. As this research only focuses on female students, their purchasing options and the factors that influence their purchasing decisions regarding brand of smartphone future research can be made to include male students.

2. LITERATURE REVIEWS

2.1 Theory Planned Behavior

Theory of planned behaviour model is used for this research. This theory predicts that a particular behavior will occur through social influence and the attitude of individuals. The intention is the cognitive representative of an individual readiness to act and is considered to be instant predictors of individual behaviors that have a positive impact on the intention to purchase.

2.2 Purchase Intention

According to Azira Rahim et. al., [8] purchasing intention can be defined as a plan, to buy goods at future time. The purchase intention still needs to depend on consumers' ability and willingness to buy. Qun et.al [9] assume that social impact has a high impact on the purchase of cell phones by young buyers. Shoppers will collect mark data from various sources around them, such as colleagues, companions and family who will ultimately choose their choice of image. Shahzad and Sobia [10] explained that young buyer tends to make brand choice a consumer choice of a particular brand. Previous research has shown evidence of a positive relationship between brand image of smartphone with purchasing intention [8].

2.3 Brand Image

The organization will try to distinguish themselves from their competitors by using brand name, term, symbol and design. According to Norazah and Norbayah [11], the brand name for smartphones has significant impact among Malaysian students. Young customers now prefer smartphones with unique features such as being able to display information quickly with minimal aggravation and clear graphical interface for touch screen interactions [11]. Another study by Shahzad and Sobia [10], have shown that brand image has positively impact on smartphone brand choice. Hence the following hypothesis was proposed:

H1 There is a relationship between brand image and purchase intention towards smartphone brand

2.4 Price

Price is essentially, the amount of money that the consumer wants to pay for exchange with products and services of value to them. Money values vary among customers because some believe that high prices demonstrate the high quality [12], yet some are not. According to Juwahir et. al. ,[13] price is regarded as a critical factor affecting young people's choice of smartphone. Other factors that can affect the decision to purchase mobile phone are convenience usage, product quality, brand and social impacts [14]. The perception of consumers about price will directly affects the intention to purchase. Consumers' perception of price refers to the consumer's point of view whether the brand of a product is 'underpriced or 'overpriced'. Consumers buy intention is driven by sales programs such as promotions for sales, coupons and discounts for price. Hence the following hypothesis was proposed:

H2 There is a relationship between price and purchase intention towards smartphone brand

2.5 Product Features

Product features are vital as the level of consumer satisfaction with each product could be determined [12]. Hardware of the smartphone is the device surface that can be physically touched like its body, size, weight, color and design [14]. Smartphone also includes computer programs, procedures and documentation and software. Based on previous study by Lay-Yee et al [14], 31% of users prefer software and only 17.6% user look at the hardware of the smartphone while the rest 52.4% will look at both software and hardware of the smartphone. In another study, the result showed that 85.8 percent of customers of university students are influence to purchase the smartphone by looking at its features [15]. According to Lay-Yee et. al.[14], there is a significant relationship between product feature and smartphone customer purchase decision that shows a strongly supported correlation of 0.777. Hence the following hypothesis was proposed:

H3 There is a relationship between product features and purchase intention towards smartphone brand

2.6 Peer Group

According to Lay-Yee et. al. [14] consumers also would buy a smartphone brand based on social group recommendations, particularly if they are professionals. Consumers tend to influence their social group during the decision-making process. They may listen and believe in different social groups, perhaps those that are more professional in certain fields, for different factors depending on their needs. The social influence might come from friends, peers, family and spouse when buying smartphones. Users of smartphones use the phone to

maintain contact on social network sites with their friends, colleagues and families. This reveals that when making any purchasing decision, people, peers and families can play a major role to influence the consumer. Hence the following hypothesis was proposed:

H4 There is a relationship between peer group and purchase intention towards smartphone brand

3. METHODOLOGY

3.1 Measure

The questionnaire consists of two section, namely Section A and Section B. Section A is multiple choice questions of regarding demographic and Section B is a five-point Likert-scale questions regarding the variables. The respondents are permitted to select only one answer for one question. Likert scale with points 5 was used with 1- Strongly Disagree, 2-Disagree, 3- Neutral, 4- Agree and 5-Strongly Agree. The variables under this study included purchase intention, brand image, price, product features and peer group. The respondents were to respond to the question in each variable based on strength of 1 to 5.

3.2 Pilot Test

Before the study starts, the completed questionnaire structure was tested on thirty randomly selected population of respondents. The purpose of this test is to test the understanding of each item in the questionnaires by the respondents. Some of the weaknesses in the design of the questionnaires have been detected from this pilot test and researchers have modified before distribution to large samples of respondents selected from the total population. After the pilot test, the questionnaire was randomly distributed to 380 female students in UniMAP, Perlis..

3.3 Demographic Analysis

The first frequency analysis is about the demographic questionnaire described in section A. This section is structure of 7 questions regarding

their age, race and some personal information regarding their smartphone which is, whether they have a smartphone or not, their experience in purchasing the smartphone before this, the brand of their current smartphone, what smartphone that they preferred more and the amount of money that they spent to buy smartphone. This information will help theresearchers to find the data and information related to the tittle of this research. There are 3 stage of categories which are 15-19 years (3.4%), 20-24 years (74.5%) and 25 years (22.1%) and above from four main groups namely, Malay (66.3%), Chinese (22.6%), India (10%) and others. About 96.6% have purchase smartphone before and 3.4% does not. There are 36.6% Apple user, followed by Vivo 17.9%, Samsung 14.5%, Huawei 8.9%, Xiaomi 7.9%, Oppo 6.8%, Asus 5% and others brands 2.4%. The results show the respondents who prefer to use Apple brand are 43.7% followed by Samsung 21.3%, and Huawei 14.2% and the rest of the percentage is from smartphone Vivo, Asus, Oppo and others brand. Lastly, the money that they spent on that smartphone. The result shows that 43.4% respondent spent on smartphone price range of RM1500 until RM2000, 26.3% spent RM1000 and RM2000, 18.9% spent RM500 until RM1000 and 11.2% spent RM500 and below.

3.4 Reliability Analysis

The value for Cronbach’s alpha for brand image is 0.712 and followed by price at 0.750 which value that can be accepted according to the Cronbach’s alpha. The value for product features is the lowest compared from other variable which is at 0.707. The peer group show the highest value at 0.826. Lastly, the dependent variable show value of Cronbach’s alpha 0.715 which is also in the range of acceptable value

3.5 Correlation Analysis

To find the relationship between the variables and the variables proposed in this reserach, the analysis for Pearson Correlation was selected. Analysis of Pearson's correlation was analyzed using SPSS.

		Brand Image	Price	Product Features	Peer Group	Purchase Intention
Brand Image	Pearson Correlation	1	.525**	.726**	.945**	.968**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	380	380	380	380	380
Price	Pearson Correlation	.525**	1	.870**	.473**	.537**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	380	380	380	380	380

Product Features	Pearson Correlation	.726**	.870**	1	.775**	.682**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	380	380	380	380	380
Peer Group	Pearson Correlation	.945**	.473**	.775**	1	.921**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	380	380	380	380	380
Purchase Intention	Pearson Correlation	.968**	.537**	.682**	.921**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	380	380	380	380	380

TABLE 1: Correlation Analysis

The above table shows the relationship between independent variables, which is the brand image, price, product features and peer group with purchase intention, dependent variable. The brand image has the highest positive correlation with buying intention based on the results obtained. Correlation coefficient value is 0.968 that is higher than other

variables and followed by peer group with correlation value is 0.921. While, product features have positive correlation with purchase intention which value 0.682. Then, for price, the coefficient value is 0.537 which is the lowest value compared to other variables. All the variables have a positive correlation with purchase intention.

3.6 Multiple Regression Analysis

Independent Variable	Beta Values	p-Value
Brand Image	.187	.000
Price	.891	.000
Product Features	.203	.000
Peer Group	.255	.000
R Square	.998	
Adjusted R Square	.995	
F Change	201.785	

Note: Significant levels: ** $p < 0.05$

Table II: Multiple Regression Analysis

Table II shows the standard coefficient of 0.187 for brand image, 0.891 for price, 0.203 for product features and 0.255 for peer group. Purchase intention variance can be made from R square which is 99.8% variable from brand image, price, product features and peer group. Adjusted R square show the value of 0.995. The value of F is the regression square. It is divided by the Mean Square Residual, resulting in $F = 201.785$. In conclusion, all the independent variables have a significant with 0.000 p value. Variables are therefore significantly and positively affect the purchase intention and supported hypothesis because p is below 0.05. The results shows that the brand image has a significant effect on purchase intention ($\beta = 0.187, p < 0.05$), which supported $H1$. Secondly, the price has a significant effect on purchase intention with ($\beta = 0.891, p < 0.05$), and product features with ($\beta = 0.203, p < 0.05$), which supported $H2$ and $H3$. Lastly, the $H4$ hypothesis suggests that peer group significantly affect the purchase intention and supported the $H4$ with analysis results intention ($\beta = 0.255, p < 0.05$).

4. DISCUSSION

This research tries to identify the important factors that influence buying intention towards smartphone brand by using multiple regression. The four determinants that influence the purchase intention are the brand image, price, product features and peer group. The result shows that, brand image has the highest effect on influencing purchase intention where brand image ($\beta = 0.187$) followed by product features ($\beta = 0.203$), peer group ($\beta = 0.255$) and price ($\beta = 0.891$). The results indicate that all variables have a significant relationship with the purchase intention, with p-Value is 0.000.

For the first hypothesis, the investigation had demonstrated that there is a positive connection between brand image and purchase intention. The result is similar to the previous study by Shahzad and Sobia [10] that brand image has a positive effect on the choice of smartphone brand. The brand name has been found to have a significant impact on

Malaysian students' demand for smartphones [11]. The results of the Pearson correlation show that the brand image has the highest correlation value on the smartphone at 0.754. While buying a smartphone, most of the respondents indicated brand image is their main consideration. For the second hypothesis, there is a positive relationship between price and purchasing decision. This indicates that price is another important thing to consider when consumers purchase a smartphone. [12] Not only that, a study conducted by Juwaheer et al. [13] also proved that price is determined as one of the important variables since it is the key determinant of a product's value. For the third hypothesis, there is a significant relationship between product features and purchase intention of a smartphone. The research carried out by Vida et al. [14] indicated that features of a smartphone will influence consumers' choice towards smartphone brands and based on the features consumers will differentiate which smartphone brands will be the origin they made the choice. However, this research concludes that respondents have less concern on product features towards purchase intention of a smartphone compared to brand image. For the fourth hypothesis, there is a significant relationship between peer group and purchase intention. The study conducted by Lay-Yee et al. [15] stated that social group influences direct information processing by consumers, by focusing on a relevant set of information to form a decision. Furthermore, the study showed a significant relationship with the customer's purchase intention and this factor is the second highest affecting smartphone dependence among the other three variables, which are brand image, product features and price.

5. LIMITATION OF THE RESEARCH

Research is conducted with a limited sample size that focuses only on students from UniMAP. Furthermore, the results represent only the female interest as male students are not included in this research project. Thus, the result can only represent a certain specified group on purchase intention. Another constraint is limited funds to conduct the research. In other words, financial factors limit researchers to explore a bigger sample.

6. RESEARCH IMPLICATION AND FUTURE RESEARCH

This study provides some potential implications for business and manufacturers who want to increase the smartphone market among students and young adults. It helps the business, making further improvements, and formulating marketing strategies to increase smartphone sales. Many students and young adults perceive that famous brands will bring more high-quality products and this influences their purchase intention. Smartphone companies can also focus, besides brand image, on smartphone design such as its size, shape, placement of buttons,

colour, and other decorative elements. These features are the first thing many young consumers look for before they can make an immediate decision to purchase a smartphone. Next, peer group has a significant impact on the purchase intention of a smartphone among female students in UniMAP. This is because as students, they will be more influenced by their peers' opinions. Lastly, price also has a significant influence over the purchase intention of female students in UniMAP, Perlis. However, businesses and manufacturers are suggested to promote competitive and affordable prices because students are very concerned and sensitive about them.

In this research, the respondents are predominantly UniMAP female students from 19-30 years old. We therefore recommend that future research may be conducted in various segment groups such as young adults, older adults, or other segments. Our target respondent is 380 and the researcher managed to secure a 100% return on the questionnaires. Hence, a bigger sampling size should be included in future research and the likelihood of uncertainty of invalid data and unreturned questionnaires should be alerted. We also propose that future research should include variables such as celebrity endorsement, effective promotion or new innovation, which influence the purchase intention of a smartphone brand.

7. CONCLUSION

This research can be a guideline for smartphone manufacturers to increase their marketing strategy among university students. Four factors that influence purchase intention are identified and examined in this study, which are brand image, price, product features and peer group. The result of this research helps to formulate effective customer retention strategies, thereby increasing profitability. Furthermore, it will also help to contribute to deeper insights for academics who wish to conduct study in related fields.

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