

Product Quality and Brand Image in Determining the Interest of Widyatama University Students Using Iphone

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Abstract- In this study revealed that there is a gap between the high levels of smartphone usage in Indonesia, but iPhone sales have even declined, a case study conducted on Widyatama University students. This study aims to determine whether product quality and brand image have an effect in determining the interests of Widyatama University students using an iPhone. The factors tested in this study are product quality and brand image as an independent variable, while buying interest as the dependent variable. The research method used is descriptive method, with data collection techniques through observation and questionnaire distribution. The population in the study were Widyatama University students with a sample of 148 respondents. Data analysis uses Path Analysis. The results showed that the two independent variables namely product quality and brand image had no effect in determining the interests of students at Widyatama University using the iPhone.

Keywords: *Product Quality, Brand Image, Buying Interest.*

1. Introduction

In this globalization era, technological developments are increasingly developing and making people able to communicate quickly and without restrictions. One of the most popular and rapidly advancing communication technologies is the smartphone. The use of smartphones in Indonesia is currently increasing rapidly from year to year because this has become a mandatory requirement. Whether it is to support business or something else. One smartphone that is currently quite widely used is the iPhone. In Indonesia, the iPhone is pretty much in demand, it can be seen from people who pretty much use the iPhone. The iPhone is a premium class smartphone whose product quality is very good and the iPhone brand image is very well known throughout the world. But with the increasing number of smartphone users in Indonesia, the interest in using the iPhone has declined. Then the authors conducted a case study on Widyatama University students. Furthermore, the authors conducted interviews and pre-surveys in order to obtain further data. The author randomly selected 30 students to get the results of their responses about the quality of the product and the brand image that the iPhone has. Then the results in the table below are obtained:

Table 1: Pre-Survey Interview

No.	Statement	Yes	No
1	Students know the quality of the product and the brand image of the iPhone	30	0
2	Students interest in using iPhone	4	26

Sample	30
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Source: Pre-Survey Interview in September 2019

Based on the above table, students know the quality of the product and brand image owned by the iPhone. The quality of iPhone products among students is very good, they say the iPhone is one of the best smartphones because one of them is stable system performance and elegant product display. The iPhone brand image for students is also good, because according to them using an iPhone will increase their confidence. Based on the results of interviews with students from the pre-survey above, it can be correlated that the student knows the quality of the product and the brand image of the iPhone product. However, the interest of Widyatama University students showed less interest in using the iPhone product. Therefore, from the phenomenon described above, a problem is found that shows the gap between product quality and brand image in determining the interests of Widyatama University students using the iPhone.

Based on the preliminary description which is the background of the problem in this study and which has been stated above, the main issues that can be formulated in this study are:

1. How is the influence of product quality in determining the interests of Widyatama University students using the iPhone?
2. How is the influence of brand image in determining the interests of Widyatama University students using the iPhone?
3. How is the influence of buying interest in determining the interests of Widyatama University students using the iPhone?
4. How influential is product quality and brand image in determining students interest at Widyatama University using the iPhone.

Based on the background and formulation of the problem, this research is intended to:

1. Obtaining research results on product quality in determining student interest at Widyatama University using the iPhone.
2. Obtaining the results of research on brand image in determining the interests of Widyatama University students using the iPhone.
3. Obtaining research results on buying interest in determining the interests of Widyatama University students using an iPhone.
4. Obtaining the results of an analysis of the influence of product quality and brand image in determining the interests of Widyatama University students using the iPhone.

2. Methodology

This research was conducted at Widyatama University, West Java, Indonesia and used students as respondents. The number of students can be known, but because researchers consider the number of students who graduate, it is considered unknown. Therefore, this study population is unknown. Based on the iteration method, this survey requires 115 data collection. The survey was conducted by distributing questionnaires totaling 150 questionnaires and managed to collect 148 data that were suitable for analysis. A pilot study was conducted for the first 30 respondents and the results obtained were a reliable questionnaire based on a Cronbach Alpha score of more than 0.5. This means that the questionnaire can be submitted and addressed to the right respondent. To collect data, sampling is done randomly. This means that all students have the same opportunity to discuss in this study. Analysis of product quality and brand image in determining the

interests of Widyatama University students using the iPhone was carried out quantitatively and qualitatively, namely analyzing data using statistical tools and the results were given an explanation. The programs used are SPSS 23 and Lisrel 8.80. In terms of research time, this study only limits the research time from September to November 2019.

2.1 Literature View

2.1.1 Product quality

According to Assauri (2015), product quality is a statement of the level of ability of a particular brand or product in carrying out the expected function. Meanwhile, according to Kotler and Armstrong (2014), product quality is a characteristic of a product or service that has the ability to meet stated or implied customer needs. Then according to Kotler and Armstrong (2016), product quality is the ability of an item to provide results or performance that is appropriate or even exceeds what the customer wants. Based on the concept mentioned above, researchers can understand that product quality is the ability and character of the iPhone product itself to meet customer desires.

According to Kotler (2016), if a company wants to maintain its competitive advantage in the market, the company must understand what aspects of the dimensions are used by consumers to distinguish the products sold by these companies from competing products. These dimensions include; form, performance, product characteristics, accuracy or suitability, and reliability. Furthermore, according to David Garvin in Tjiptono's book (2016) product quality has eight dimensions as follows: performance, features, reliability, specification reliability, durability, serviceability, aesthetics, and perceived quality. Meanwhile, according to Mowen and Minor in Dinawan (2012) provides several dimensions of product quality, including: performance, reliability, durability, safety. From this dimension, the researcher took several factors relevant to this research, namely Style and Durability.

2.1.2 Brand Image

Patterson published in Parker (2013) states "Brand image is an objective perception, a mental representation of functional and non-functional information about a product or service". Kotler and Keller (2012) brand image is the customer's perception of a brand as reflected by brand associations held by consumers' memories. Kapferer (2014) states "Brand image is a system of interrelated mental links that influence the strength of a brand to influence buyers". From the theory stated above, for the researchers themselves the brand image is the power of the iPhone brand in influencing buyers with close relationships, and marketing communication efforts through word of mouth or advertising.

Brand association in measuring brand image according to Aaker (2015) is divided into four aspects, namely: value offered, brand personality, organizational association, differentiation. Meanwhile, according to Hamel and Prahalad (2013) developed into 4 dimensions as a measure of brand image, namely: recognition, reputation, emotional relations, and scope. Furthermore, according to Kotler and Keller (2015), the main dimensions that shape brand image is brand identity, brand personality, Brand Association, Brand Attitudes and Behavior, Brand Benefits and Competence.

The image formed based on the quality of the product produced is so satisfying that it will encourage consumers to buy iPhone products, because the value offered is in accordance with the money spent. So, it gets recognition from consumers about the identity of the Apple brand.

2.1.3 Buying Interest

Kotler and Keller (2014) buying interest is consumer behavior that arises as a response to objects that

indicate the customer's desire to make a purchase. Meanwhile, Durianto and Liana (2004) suggested the definition of buying interest is something related to consumers' plans to buy a particular product and how many units of product are needed in a certain period of time. Meanwhile, according to Bearman and Evans (2010), the definition of buying interest is an incentive that arises in a person to buy goods or services to meet their needs. From the theory, the researcher understands that buying interest is an encouraging response to consumers' desire to buy an iPhone in order to fulfill their needs.

According to Saiman (2014) states that the factors that influence interest are inner impetus factors, social motive factors, emotional factors. Stages of producers in determining buying interest or determining consumer impulses in purchasing products or services offered, can be seen in the AIDA concept or model developed by Kotler and Keller (2014) namely the stage of paying attention, the stage of interest, the stage of desire, and the stage of decide / act. The dimensions taken in buying interest are the stage of paying attention and the stage of interest.

2.2 The Relationship Between Product Quality and Brand Image

Research conducted by Ali (2016) confirms that the quality of hotel websites influences the flow of perceived customers which in turn influences their satisfaction and purchase intentions. In addition, the perceived flow also mediates the relationship between hotel website quality, customer satisfaction, and purchase intention. This means that product quality affects buying interest. Furthermore, research previously conducted by Ali et al. (2018) revealed that Halal brand image and Halal brand trust can significantly influence consumer buying interest. This means that the brand image of the iPhone can affect buying interest.

From the relationship between variables that have been explained, the paradigm of this study can be described as follows:

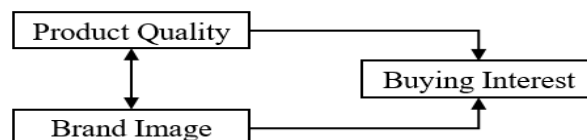


Figure 1: Research paradigm

2.3 Hypotesis

The hypotheses in this study are as follows:

"Product quality and brand image are influential in determining the interests of Widyatama University students using iPhone"

3. Results and Discussion

3.1 iPhone Product Quality

The quality of iPhone products according to Widyatama University students is included in the good category, where respondents in this study are Widyatama University students who have given positive answers to questions about the quality of iPhone products. The majority of Widyatama University students are aware of the quality of iPhone products that are above the average competitor, this is because the iPhone is indeed launching high-quality products on the market. One of the advantages is the design / model that is interesting, because the iPhone is always innovating continuously, so especially in its design iPhone looks always different from its competitors. Using an iPhone can also increase self-confidence, this can happen

because for most people the iPhone is a premium smartphone, so when someone uses an iPhone it will increase their confidence. But the iPhone also has a weakness, namely where the device, especially the LCD that is easily damaged / cracked when hit with hard objects. This is one of the factors that inhibits Widyatama University students from using the iPhone.

3.2 iPhone Brand Image

The brand image owned by the iPhone according to Widyatama University students is very interesting, where respondents in this study are Widyatama University students who have given positive answers in questions about the brand image owned by the iPhone. iPhone itself has a very famous brand image, which is Apple. There is no doubt about this brand image because everyone in various parts of the world already knows its popularity. Many people consider that the iPhone is an attractive smartphone model, many competitors who mimic the appearance or design of this iPhone. So no wonder if the iPhone is considered as an attractive smartphone model. Supporting factors for the iPhone is an interesting model, when compared to competitors, the iPhone is always the differentiator. Many competitors who imitate the model, maybe even become a benchmark in smartphone design. However, even though the iPhone is an attractive smartphone model, there are inhibiting factors, namely the quality of the product is the same as competitors. Even though the iPhone operating system is above its competitors, the quality of the device is still the same ie easily damaged, especially the LCD. So that it slightly affects the iPhone brand image for Widyatama University students.

3.3 Student Interest in Using an iPhone

Overall, Widyatama University students pay less attention and are interested in iPhone products. The obstacle allegedly faced by Widyatama University students is that the price is quite expensive and there are many competing products, especially from the appearance of the design. So, most of them prefer the exact same product as the iPhone display. Then in terms of price they prioritize cheap, so this is why they choose competitors product. Because most according to them prioritize the need for function rather than style. In addition, they also prefer products that have been trusted, they are loyal and trust in certain products that have been used for a long time. They are reluctant to try to switch to iPhone products.

3.4 Results of Count

As previously revealed that to test the truth of the major hypothesis in this study, it can be seen in the calculation of the correlation coefficient between variables. According to Santoso (2016), correlation numbers above 0.5 indicate a strong enough correlation, conversely if below 0.5 the correlation is weak. The results obtained can be seen in the following table:

Table 2: Correlation Matrix

Variable	Product Quality	Brand Image	Buying Interest
Product Quality	1,000		
Brand Image	0,164	1,00	
Buying Interest	-0,163	-0,21	1000

Source: Questionnaire processing November 2019

The table above shows that:

1. Strong relationship between the influence of Product Quality and Consumer Purchase Interest is -0,163. This shows that the reciprocal relationship between the two variables reaches the level of -16.3 percent or in other words the level of the relationship between the two variables is very weak.
2. Strong relationship between the influence of Brand Image and Consumer Purchase Interest is -0,021. This shows that the reciprocal relationship between the two variables reaches the level of -2.1 percent or in other words the level of the relationship between the two variables is very weak.
3. Strong relationship between the influence of Product Quality and Brand Image is at 0.164. This shows that the reciprocal relationship between the two variables reaches the level of 16.4 percent or in other words the level of the relationship between the two variables is low but certain.

By using the Lisrel 8.80 program to calculate path analysis, structural equations are obtained such as the results of the following formula:

$$\text{Interest} = -0.16 \cdot \text{Product} + 0.0059 \cdot \text{Brand} + \text{Errorvar} = 0.97, R^2 = 0.027$$

(0.083) (0.083) (0.11)
-1.97 0.071 8.51

Source: Questionnaire processing November 2019

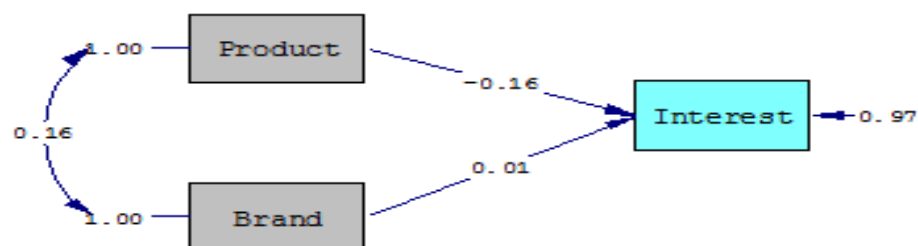
From the resulting structural equation, we can know the magnitude of the path coefficient for each variable. The magnitude of the path coefficient for each variable is shown in the table below:

Table 3: Path Coefficient

Individual Influence	PYX1= -0,16
	PYX2 = 0.0059
Concurrent Influence	R2Y (X ₁ X ₂) = 0.027
Effect of Residual Coefficient	PY e = 0.97

Source: Questionnaire processing November 2019

By using the equation and path coefficient table above it can be described the structure of the relationship between 3 variables. The figure below illustrates the relationship structure and path coefficients of each variable:



Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

Figure 2: Structural Relationships X₁, X₂, and Y
Source: Questionnaire processing November 2019

The tables and diagrams in the path above show that:

1. The direct effect of product quality variables on consumer buying interest is -0.16 or equal to -0.0256 (squared). This can be interpreted that the product quality variable contributes -2.56 percent to the consumer's purchase interest variable and falls into the very weak category.
2. The direct effect of brand image variables on consumer buying interest is 0.0059 or equal to 0.0000003481 (squared). This can be interpreted that the magnitude of the contribution of the brand image variable to the variable consumer buying interest is 0.003481 percent and falls into the very weak category.
3. The direct effect of the two variables simultaneously on consumer buying interest is 0.027 or 0.000729 (squared). This shows that both of these variables contribute to consumer buying interest by 0.0729 percent and fall into the very weak category.
4. The effect of residual variable (e) on Y variable is 0.97 or 97 percent. This shows that the interest of Widyatama University students to use the iPhone is influenced by other factors very strongly by 97 percent.

From the structural relationship above, the hypothesis test can be seen in the following table:

Table 4: Hypothesis testing

1. Simultaneous Test				
Hypothesis	f_{count}	f_{table}	Result	Statistical Conclusion
H_0 Product Quality and Brand Image influence Buying Interest	2,02	3,91	$F_{count} < F_{table}$ Not Affect	H_0 rejected Product Quality and Brand Image do not affect Buying Interest
2. Partial Test				
Hypothesis	t_{count}	t_{table}	Result	Statistical Conclusion
H_0 Product Quality influences Buying Interest	-1,97	1,97	$F_{count} < F_{table}$ Not Affect	H_0 rejected Product quality does not affect Buying Interest
H_0 Brand Image influences Buying Interest	0,071	1,97	$F_{count} < F_{table}$ Not Affect	H_0 rejected Brand Image does not affect Buying Interest

Source: Questionnaire processing November 2019

The table above shows that both simultaneously and partial, the two variables do not affect the interest of Widyatama University students to use the iPhone. Maybe it's because the iPhone is only for the upper middle class, so only certain people who want to use the iPhone. iPhones are often used only to increase

one's confidence or make someone look cool when using an iPhone. Therefore, most Widyatama University students are not too interested in using an iPhone, because for them the most important is their needs, rather than for their style. They prioritize price, function and loyalty.

4. Conclusion

The quality of products owned by the iPhone according to Widyatama University students shows good criteria, because basically the iPhone is a superior product from Apple. In marketing its products, Apple has always set high quality targets, so that on average iPhone products are always durable and long lasting. So the supporting factor for the iPhone is an attractive design / model, because the iPhone is always innovating continuously, so especially in iPhone design it always looks different from its competitors. Using an iPhone can also increase self-confidence, this can happen because for most people the iPhone is a premium smartphone, so when someone uses an iPhone it will increase their confidence. The iPhone has a disadvantage that is where the device, especially the LCD which is easily damaged / cracked when dropped and hit with hard objects. This can be overcome with the iPhone improving the quality of the device's durability better, or one of them by trying to work with companies engaged in hardware that produces lcd. So that later iPhone hardware is stronger and tougher. So the iPhone also needs to do this for all types of types, so it's not tied to only certain types, but to update for all types of products.

Apple's own image as a company that manufactures iPhones shows very interesting among Widyatama University students. Indeed, because basically Apple already has the strength of its brand image. This achievement is inseparable from Apple's consistency in marketing one of its products, the iPhone with very good quality. That makes the iPhone's brand image name, Apple, already very familiar with Widyatama University students, many of whom already know the name of this brand image. However, there are inhibiting factors that slightly affect the iPhone brand image, namely the quality of the device is easy to broken, especially the LCD, so that it makes a stigma against the iPhone brand image. Therefore, researchers provide advice for iPhone product companies to further improve the quality of their devices, so that the iPhone brand image will further increase.

Widyatama University students have an interest in iPhone products. Widyatama University students showed enthusiasm for the quality and brand image of the iPhone. The iPhone is a premium class smartphone; many people want to have it. Because very few people own an iPhone, owning an iPhone can increase self-confidence. Because for the price is quite expensive for some students, so the demand is very small, many are not interested in using an iPhone. So most students already have a favorite product, so they are very loyal to one of their trusted brands. Therefore, the right suggestion is that the iPhone focus on making its features different from its competitors to become its superiority. Such as focusing on improving the quality of the operating system, making new and different designs, and improving the quality of the camera. So it becomes excellence. So, even though the price of an iPhone is expensive, it can get advantages that other competitors don't have.

The relationship between product quality and brand image in determining student interest at Widyatama University using the iPhone has a low but definite relationship. This shows that the two variables of product quality and brand image do not affect the interests of Widyatama University students using the iPhone. There are other factors that influence it, namely function, price and loyalty.

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