

# The impact of brand image, product quality and price on purchase intention of smartphone

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**Abstract:** *This study aims to examine the effect of brand image, product quality and price on purchase intention of smartphone in Surabaya. The study was conducted by involving 150 students of the Business Faculty of the University of Widya Mandala in Surabaya as respondents. But the data that can be analyzed is only 142 respondents. By using regression analysis the results show that brand image and price have a positive and significant effect on purchase intention, while product quality has no significant effect. This certainly does not mean that product quality is not important. Therefore, the management of the company still needs to maintain a good brand image by providing good product quality, but at competitive and affordable prices for consumers, especially for the younger generation who have limited purchasing ability.*

**Key Words:** *brand image, product quality, price, purchase intention.*

## 1. INTRODUCTION:

Along with the development of technology, currently the number of smartphone users in Indonesia is also experiencing very rapid growth. The digital marketing research agency Emarketer estimates that in 2018 there will be more than 100 million active smartphone users in Indonesia (Rahmayani, 2015). Citing a report from the International Data Corporation (IDC) research institute, smartphone shipments in the third quarter (July-September period) 2018 reached 8.6 million units. This number grew 18% compared to the same period in 2017 (Khoirunnisa, 2018). Therefore, it is not surprising that currently more and more brands of smartphones are on the market, so competition between brands in the market is getting tougher. On the one hand, of course this will make consumers have many choices and it's easier to get a smartphone. However, on the other hand, consumers become confused so they have difficulty in making choices. This is because many new brands with almost the same features are even more sophisticated than existing brands, but at lower prices. Therefore, marketers need to know the factors that can influence consumers in choosing and buying a smartphone.

The purchasing process begins with the identification of needs, information seeking, evaluation of alternatives, purchasing decisions and actions after purchase (Kotler and Armstrong, 2008: 179). If consumers have recognized their needs, consumers will seek information to find out more about the product or service to meet those needs, such as information about the brand, quality, and price of the product to be purchased. Furthermore, at the evaluation stage, consumers will rank brands and form intention to buy.

Buying intention will bring consumers at the stage of deciding to buy or not buy. There are 2 factors that can change purchase intentions into buying or not buying decisions (Kotler and Keller, 2009: 189), namely: (1) the attitude of others. The attitude of others can negatively affect consumers' purchase intentions, for example the attitude of others who are disappointed with the company's products can influence consumers' purchase intentions on the company's products, even though it also depends on the motivation of consumers to comply with the wishes of others. (2) factors that are not anticipated. Factors that are not anticipated, such as suddenly consumers are dismissed from their jobs because of the deteriorating economic conditions, can change the position of consumers to make purchases.

Although buying intention does not always end with a purchase decision, the marketer still has to pay attention and motivate consumers to have the intention to buy. The stronger the intention of consumers to buy a product / service, the greater the likelihood that the consumer will take action to buy. This certainly will have a positive impact on the company. In order for companies to be successful in motivating consumers to make purchases, the company needs to do the right marketing strategy.

There are many factors that can influence consumers' purchase intentions, including brand image, product quality, and price. Brand images can be interpreted as consumer perceptions of a brand, which is formed from personal experience and other people's experiences in the form of information received by consumers. Famous or popular brands on the market are usually more trusted and can lead to positive perceptions for consumers, thus encouraging consumers to make purchases.

Product quality can also influence consumer purchase intentions. Often consumers assume that products with brands that are popular, more quality than products with brands that are less or not popular. This is due to the assumption in the community, that a well-known or popular brand pays more attention to the quality of its products, providing complete information about its products; for example regarding product specifications and benefits of the product, even the

company also provides guarantees and provides information on how to file complaints. In addition to brand image and product quality, prices are also one of the considerations of consumers in deciding to buy or not buy a product. According to Tjiptono (2001: 19), for companies to be successful in competition, companies must try to produce products / services that consumers want at a reasonable price. Appropriate prices can be interpreted as prices that are in accordance with the quality of products offered by the company, can also be interpreted as prices that are competitive.

To find out the extent to which these factors influence consumer purchase intentions, further research is needed. Therefore the purpose of this study is to:

1. analyze the influence of brand image on the intention to buy a smartphone
2. analyze the influence of product quality on the intention to buy a smartphone
3. analyze the effect of prices on smartphone purchase intentions

## **2. LITERATURE REVIEW:**

### **2.1 Purchase Intention**

According to Ajzen (2005: 99), intention is a desire that is stored in one's memory and will affect the actions to be taken. Thus, purchase intention can be interpreted as the desire of someone to take action to buy a product or service. In order for buying action to become a reality, a trigger is needed, because without the trigger the purchase intention remains in the memory. The trigger can be from external, for example information about a product delivered by another person or from the manufacturer of the product through advertising; or from internal, for example someone's need for a product.

Kotler et al. (1999: 156) states that purchase intention arises after an alternative evaluation process. In the evaluation process, someone will make a series of assessments of the products they want to buy. There are various assessments that can be made by consumers, including valuation based on brand image, product quality, and price.

### **2.2 Relationship between Brand Image and Purchase Intention**

Brand image is a perception of the brand described by brand associations that exist in the minds of consumers (Keller, 2013: 97). According to Lau and Phau (2007), brand image is consumer confidence in a brand. Brands can give a good or positive impression to consumers, but can also give a bad or negative impression. In this case the brand image is used as a consumer evaluation that can lead to consumer purchase intentions. If consumers' perceptions and beliefs about a brand are positive, of course it can lead to purchase intention. Park et al. (1986 in Sondoh et al., 2007) states that when a company has a positive brand image in the community, the company can obtain a competitive advantage in a sustainable manner and can increase its market share. The results of Amron's research (2018) show that the brand image has a positive and significant effect on the purchase of MPV cars. Based on the description above, a hypothesis can be arranged:

H1: Brand image has a positive and significant effect on purchase intention

### **2.3 Relationship between Product Quality and Purchase Intention**

Product quality is not just the physical appearance of the product, but the quality of the product emphasizes the product's ability to satisfy consumer needs. According to the American Society for Quality Control (in Kotler and Keller, 2009: 143), quality is the overall features and characteristics of a product or service that depends on its ability to satisfy consumer needs. If a product can satisfy consumer needs, then the product is said to be of high quality. The more consumer needs that can be satisfied by a product, then the product certainly is of higher quality or good quality. Good product quality will certainly be an attraction that raises consumer intention to buy the product. For companies that do not pay attention to the quality of the products they produce, it certainly makes consumers not intend to buy their products, and results in companies losing the opportunity to earn income.

Several previous studies showed product quality had a positive and significant effect on purchases, including the results of Amron's (2018) study which showed product quality had a positive and significant effect in purchasing MPV cars. Likewise, research from Suhaily and Darmoyo (2017) shows that product quality has a positive and significant effect in purchasing Japanese electronic brands. Based on the description, a hypothesis can be arranged:

H2: Product quality has a positive and significant effect on purchase intention

### **2.4 Relationship between Price and Purchase Intention**

Price is an element that generates income for the company (Monroe, 2002; Kenning et al., 2011 in Amron, 2018). According to Kotler and Armstrong (2008: 345), prices are all values given by consumers to benefit from using products or services. Consumers can assess the price of a product is expensive, cheap or reasonable, depending on each perception. Consumer perceptions usually arises after comparing the price of a product with the price of products are offered by competitors, or after comparing the price with benefits obtained. Sari and Astuti's research (2012) explained that prices have a positive and significant effect on furniture purchases, as well as the results of Amron's research (2018) which shows that prices have a positive and significant effect on the purchase of MPV cars. Based on the description, a hypothesis can be arranged:

H3: Price has a positive and significant effect on purchase intention

**2.5 Conceptual Model**

From the description above, the conceptual model can be described as follows:

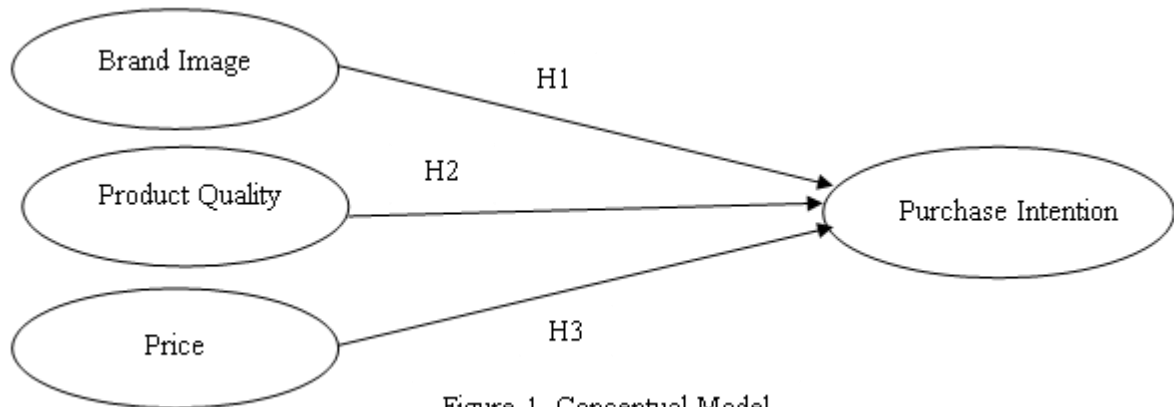


Figure 1. Conceptual Model

**3. METHOD:**

This study uses primary data obtained from distributing questionnaires to 150 respondents. The research respondents were students of the Faculty of Business, University of Widya Mandala in Surabaya. The questionnaire contains instruments that ask respondents' perceptions of the independent variables under study, namely brand image, product quality and price. The data obtained was processed using regression analysis with the SPSS program.

**4. FINDINGS:**

**4.1 Respondent's Profiles**

Of the 150 questionnaires distributed, only 142 questionnaires could be processed, because 8 questionnaires were not answered completely. Based on gender, 58 respondents (41%) were male and 84 respondents (59%) were female.

**4.2 Validity and Reliability Test**

Validity test is used to measure the validity rather than the questionnaire. In this study, the validity test was considered by carrying out bivariate correlation between each indicator score with the total construct score. The test results show all of the r-value indicator are greater than the r-table value of 0.165 and the significance values for all indicators are less than 0.05 (see Table 1). Thus all indicators are valid.

**Table 1. Validity Test Results**

Variable	Indicator	Correlation Coefficient			Remarks
		r-value	significance	r-tabel	
X1	X1.1	0.706	0.000	0.165	Valid
	X1.2	0.713	0.000	0.165	Valid
	X1.3	0.602	0.000	0.165	Valid
	X1.4	0.712	0.000	0.165	Valid
X2	X2.1	0.717	0.000	0.165	Valid
	X2.2	0.689	0.000	0.165	Valid
	X2.3	0.609	0.000	0.165	Valid
	X2.4	0.701	0.000	0.165	Valid
X3	X3.1	0.728	0.000	0.165	Valid
	X3.2	0.702	0.000	0.165	Valid
	X3.3	0.598	0.000	0.165	Valid
	X3.4	0.690	0.000	0.165	Valid
Y	Y1	0.719	0.000	0.165	Valid
	Y2	0.725	0.000	0.165	Valid
	Y3	0.592	0.000	0.165	Valid
	Y4	0.695	0.000	0.165	Valid

Reliability testing is used to measure the reliability of a questionnaire. The reliability test results show the cronbach alpha value of the variables studied at least 0.607 (see Table 2). Based on the provisions, the questionnaire is declared reliable if the cronbach alpha value is more than 0.60 (Nunnally, 1969 in Ghazali, 2002: 133), thus all items of this research questionnaire are reliable.

**Table 2. Reliability Test Results**

Variable	Cronbach Alpha		Remarks
	Requirement	Result	
X1	> 0.60	0.617	Reliable
X2		0.607	Reliable
X3		0.609	Reliable
Y		0.617	Reliable

**4.3 Normality, Multicollinearity, Autocorrelation, and Heteroscedasticity Test Results**

The normality test in this study uses the P-P Plot Graph. Based on the test results found spread points around the diagonal line and follow the direction of the diagonal line, this is called the regression model fulfilling the assumption of normality. A good regression model, multicollinearity, autocorrelation and heteroscedasticity should not occur. Based on the provisions, multicollinearity between independent variables does not occur if the value of the variance inflation factor (VIF) is less than 10 or the tolerance value is more than 0.10 (Ghozali, 2013: 106). The test results in this study show that the minimum VIF value is 1,036 and maximum is 3,751, meaning that all VIF values are less than 10. Tolerance value is at least 0.267 and maximum is 0.966, meaning that all tolerance values are more than 0.10. Thus it can be concluded that there is no multicollinearity between independent variables in regression.

To detect autocorrelation, the Durbin-Watson (DW) test can be used, provided there is no autocorrelation if  $du < DW < 4-du$  (Ghozali, 2013: 111). With a confidence level of 0.05, the number of samples are 142 and the number of independent variables are 3, then the value of  $du = 1.766$  is obtained. The results showed DW-value of 1.936, thus there was no autocorrelation. The heteroscedasticity test in this study used the scatterplot chart. The test results show the points spread above or below the number 0 from the Y axis, this shows that there is no heteroscedasticity.

**4.4 Multiple Regression**

The multiple regression results of this study can be written in the regression equation as follows  $Y = 2.069 + 0.248X1 + 0.188X2 + 0.440X3$  (see Table 4). The regression coefficients of each independent variable (X1, X2 and X3) are positive, this indicates that any increase in the value of the independent variable will increase the value of the dependent variable (Y).

**4.5 F-test dan t-test**

The F test is used to test the effect of all independent variables simultaneously on the dependent variable. The results of the F test in this study are shown in Table 3. The calculated F value is 41.548 with a significance value of 0.000. Significance value is smaller than the value of  $\alpha$  ( $\alpha = 0.05$ ), this shows that all the independent variables in this study simultaneously have a significant effect on the dependent variable of purchase intention. The t-test is used to test the proposed hypothesis and the test results are shown in Table 4. Significant values of variables X1 and X3 are smaller than  $\alpha$  ( $\alpha = 0.05$ ), which shows that hypothesis 1 and hypothesis 3 are accepted. The significance value for X3 variables is more than 0.05, indicating that hypothesis 2 is not accepted.

**Table 3. F Test Results ANOVA<sup>b</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	337.242	3	112.414	41.548	.000 <sup>a</sup>
Residual	373.377	138	2.706		
Total	710.620	141			

<sup>a</sup>. Predictors: (Constant), Price, Brand Image, Product Quality

<sup>b</sup>. Dependent Variabel: Purchase Intention

**Table 4. t-test Results Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std Error	Beta		
1	(Constant)	2.069	1.317		1.571	.119
	Brand Image	.248	.062	.250	3.986	.000
	Product Quality	.188	.121	.186	1.558	.122
	Price	.440	.118	.444	3.746	.000

<sup>a</sup>. Dependent Variable: Purchase Intention

**5. DISCUSSION:**

This study aims to analyze the effect of brand image, product quality and price on buying smartphone intentions in Surabaya. The results showed that brand image and price had a positive and significant effect on smartphone purchase

intentions in Surabaya, and prices had the greatest influence compared to other independent variables, namely with a coefficient of 0.440 with sig 0.000; but product quality has no significant effect. The highest influence on smartphone purchase intention is price, it shows that competitive prices and in accordance with consumer capabilities are considered by consumers, especially for consumers who are students. This is because the money used to buy a smartphone is still obtained from giving parents, so purchasing power is still limited. These results are in accordance with the results of Amron's research (2018); Sari and Astuti (2012) which show that prices influence purchasing decisions.

Brand image has a positive and significant effect on purchase intention, indicating that the better the consumer's perception of the brand, the consumer's purchase intention will also increase. This shows that consumers, in this case students, still have high buying intentions on popular brands of smartphone products. Brand trends or popularity are more attractive to this group. The results of this study are in accordance with the results of research by Suhaily and Darmoyo (2017) which state that brand image influences the purchase of Japanese electronic brands.

Product quality does not have a significant effect on purchase intention, this indicates that in making purchases, consumers do not consider the quality of the product. The results of this study are different from those of Sari and Astuti (2012), and Amron (2018). This can happen because for consumers, especially the younger generation (students), often changing smartphone products is more proud than maintaining an older smartphone that is more durable. Changes in smartphone features that are very fast changing and the desire to change products often make consumers reduce product quality considerations.

## 6. CONCLUSION:

The results of this study indicate that brand image and price have a positive and significant effect on purchase intention. Price has a greater influence than brand image. However, product quality has no effect on buying smartphone intentions. This certainly does not mean that product quality is not important. Therefore the management of the company still needs to maintain a good brand image by providing good quality and also trying to provide competitive and affordable prices for consumers, especially for the younger generation who have more limited purchasing ability.

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