

### DETERMINANTS OF OPPO SMARTPHONE PURCHASE DECISION MAKING AMONG STUDENTS (CASE STUDY OF GUNADARMA KARAWACI STUDENTS)

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**Abstract:** This study aims to analyze the effect of product quality, price and brand image on purchasing decisions on Oppo smartphones partially and simultaneously. Respondents in this study were 100 respondents, the sampling technique used was purposive sampling technique using the Slovin formula. The data collection method uses an online questionnaire. The data analysis technique used is multiple linear regression analysis test, t test, classic assumption test, coefficient of determination test, f test using SPSS 20 for windows. The results of this study indicate that partially product quality and brand image have an effect on purchasing decisions, while price has no effect. Simultaneously product quality, price and brand image have a significant effect on purchasing decisions with a determination coefficient of 65% influenced by these three variables, namely product quality, price and brand image, and the rest are influenced by variables outside the research.

**Keywords:** product quality, price, brand image, purchase decision.

**INTRODUCTION**

During the Industrial Revolution Era 4.0, we were required to be able to use technology for our daily interests and needs. Starting from the world of education, offices, or households. Like a smart phone or what is often known as a smartphone. Currently, everyone in the world has a smartphone that can connect to the internet. Smartphones are no longer a means of conversation like SMS (short message service) or voice, but also for accessing electronic mail, accessing social networks, reading online news, and watching films of interest. The following is cellular user data in Indonesia for January 2019;



Figure 1. Cellular Users in Indonesia January 2019

Based on Figure 1, cellular users in Indonesia have reached 355.5 million, far more than the total population of Indonesia, which is 133%. Of that amount, 97% are prepaid card users while postpaid card users. Penetration access to 3G and 4G reaches 84%. These results prove that there are very many smartphone users in Indonesia who are connected to the internet. The large number of smartphone users in Indonesia

requires smartphone companies to be able to compete so that their goods sell well in the market. Therefore, marketing must be good at dealing with competition, business development to gain profit and survive in this globalization era.

Purchasing decision is a decision as the ownership of an action from two or more to make a choice, everyone has considered something before making a decision to buy an item, whether the product to be purchased is in accordance with their needs or desires because everyone is different in assessing a product. Then the product purchased is in accordance with his condition and the costs incurred do not exceed what he has, sometimes people do not think beforehand to make a purchase because people tend to only look at their physical appearance without thinking about whether what they are buying will suit their needs.

Febriana Margareta S (2017) who is the object of research is Xiaomi Mobile with the title Effect of Product Quality and Price on Purchase Decisions for Xiaomi Mobile, where the X variable is Product Quality and Price, Y variable is Purchase Decision. With the results of the study that product quality and price have a partial effect on the decision to purchase a Xiaomi mobile phone. Where F Count is greater than F Table so that it is declared to have a simultaneous effect on the decision to buy a xiaomi mobile phone.

Discussing the smartphone market share in Indonesia, the following is the market share for the types of smartphones traded in Indonesia, namely

Table 1. Market Share of the Top 5 Smartphone Companies in Indonesia, 2019 Q2

Company	2018Q4	2019Q1	2019Q2
Samsung	27.0%	31.8%	26.9%
OPPO	19.7%	23.2%	21.5%
vivo	11.8%	14.9%	17.0%
Xiaomi	20.7%	10.8%	16.8%
realme	1.6%	1.4%	6.1%
Others	19.2%	17.8%	11.7%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Based on table 1, it can be seen the market share of Oppo smartphone products in Indonesia. Occupying in second position after Samsung, can prove that Oppo Smartphone products have product attributes such as quality, features, and design that can attract consumer interest and Oppo Smartphones have high selling prices, so the price drop will not be too large if the Smartphone is resold . This is very different from other products. In addition, promotion is also one of the factors that Oppo always uses to introduce new products that aim to make consumers aware of and interested in buying new products.

## RESEARCH METHOD

The type of data used in this research is quantitative data. The data source used is primary data, namely research data sources obtained directly from the first source (not through intermediary media). Primary data in this study were obtained by distributing online questionnaires to respondents. In addition, this study also uses secondary data, namely data obtained by studying several references and studying several books related to this research such as from the internet, books and journals.

The population used was 1,068 students at Gunadarma Karawaci University, Faculty of Economics, 2015-2018. In taking this sample, the technique used is purposive sampling which is part of nonprobability sampling. The selected respondents were Gunadarma University Karawaci students who used Oppo smartphones.

## RESULTS AND DISCUSSION

### Instrument Test

#### Validity test

The validity test aims to find out whether each question item submitted to the respondent is valid or not. To obtain the results of rcount using the help of SPSS software version 20 which is then compared with rtable. In conducting this validity test using the amount of data (n) as many as 100 respondents. With a significant level of 5% (2 sides) and table values obtained by the formula  $n-2$  means,  $100-2 = 98$ . Then the rtable obtained is 0.196.

Table 2. Validity Test Results

Indicator	Corrected Item - Total Correlation (R Hitung)	R Tabel	Description
<b>Product Quality (X<sub>1</sub>)</b>			
X <sub>1.1</sub>	0,814	0,196	<b>VALID</b>
X <sub>1.2</sub>	0,839	0,196	<b>VALID</b>
X <sub>1.3</sub>	0,828	0,196	<b>VALID</b>
X <sub>1.4</sub>	0,718	0,196	<b>VALID</b>
<b>Price (X<sub>2</sub>)</b>			
X <sub>2.1</sub>	0,751	0,196	<b>VALID</b>
X <sub>2.2</sub>	0,659	0,196	<b>VALID</b>
X <sub>2.3</sub>	0,780	0,196	<b>VALID</b>
X <sub>2.4</sub>	0,718	0,196	<b>VALID</b>
<b>Brand Image (X<sub>3</sub>)</b>			
X <sub>3.1</sub>	0,703	0,196	<b>VALID</b>
X <sub>3.2</sub>	0,818	0,196	<b>VALID</b>
X <sub>3.3</sub>	0,835	0,196	<b>VALID</b>
X <sub>3.4</sub>	0,754	0,196	<b>VALID</b>
<b>Purchase Decision (Y)</b>			
Y.1	0,757	0,196	<b>VALID</b>
Y.2	0,767	0,196	<b>VALID</b>
Y.3	0,568	0,196	<b>VALID</b>
Y.4	0,868	0,196	<b>VALID</b>

Menunjukkan bahwa Dari hasil perhitungan tabel diatas, diperoleh data yang menyatakan bahwa dari indikator Shows that From the results of the calculation table above, data is obtained which states that from the indicators given to 100 respondents a Corrected Item-Total Correlation (R count) value is found to be greater than 0.196 (R table) which means that all statements in this study are valid results. So that it can proceed to the next research stage.

### Reliability Test

The Reliability Test is used to determine the consistency of the measuring instrument, whether the measuring device used is reliable and remains consistent if the measurement is repeated. For decision making Reliability Test can use the limit of 0.6. If the Cronbach alpha value is <0.6 then it is not reliable, and vice versa if the Cronbach alpha value is > 0.6 then the data is reliable.

Table 3. Reliability Test Results

Variabel	Cronbach's Alpha	Reliable Value	Description
X <sub>1</sub>	0,807	0,6	<b>RELIABEL</b>
X <sub>2</sub>	0,694	0,6	<b>RELIABEL</b>
X <sub>3</sub>	0,780	0,6	<b>RELIABEL</b>
Y	0,730	0,6	<b>RELIABEL</b>

It can be seen that the Cronbach alpha value of each tested variable is above > 0.6. A variable is said to be reliable if the cronbach alpha value is > 0.6. So it can be concluded that all the variables in this study are reliable.

### Classic assumption test

#### Normality test

The purpose of the normality test is to find out whether the distribution of a data follows or approaches the normal distribution, namely the distribution of data that has a pattern like a normal distribution. There are 2 ways that can be used for the normality test:

Graph Analysis

If the data/points spread far from the diagonal or do not follow the diagonal line, the regression model does not meet the normality assumption and if the data/points spread to follow the direction of the diagonal line, the regression model meets the normality assumption.

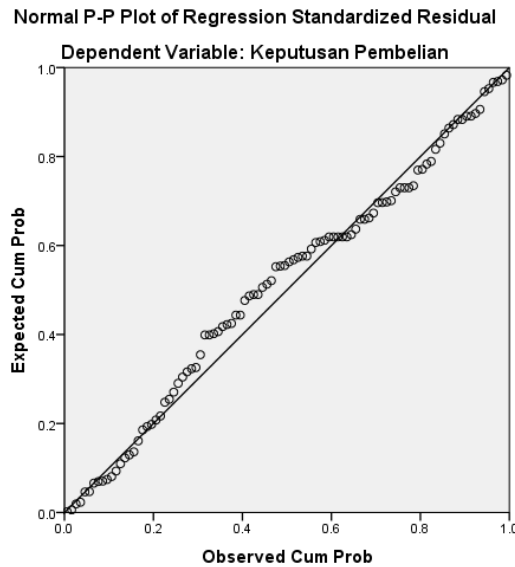


Figure 2. Results of Normality Test Graph Analysis

From the graphic image above, it can be seen that the dots spread following the direction of the diagonal line. It can be said that the regression model used to conduct research on Product Quality, Price, and Brand Image on the Purchase Decision of Oppo Smartphone products fulfills the assumption of normality.

Statistic analysis

Normal or not the data distribution of a variable is indicated by the magnitude of the Asymptotic Significant value, if the Asymptotic Significance of the data is greater than the sig level. 5%, then the data is classified as have a normal distribution pattern. On the other hand, the Asymptotic Significance is less than or equal to 5%, so the data is intended to have an abnormal distribution pattern.

Table 4. Results of Statistical Analysis of the Normality Test

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		100
Normal Parameters <sup>a,b</sup>	Mean	0E-7
	Std. Deviation	1.25835128
Most Extreme Differences	Absolute	.087
	Positive	.053
	Negative	-.087
Kolmogorov-Smirnov Z		.874
Asymp. Sig. (2-tailed)		.429

a. Test distribution is Normal.

b. Calculated from data.

It can be seen that the significance value is  $0.429 > 0.05$ . So it can be concluded that the data tested is normally distributed.

Multicollinearity Test

To find out the test results of the multicollinearity test, several ways can be done, namely by looking at the tolerance value and the VIF value. If the tolerance value is above 0.10 ( $> 0.10$ ) and the VIF value is below 10 ( $< 10$ ) then multicollinearity does not occur, otherwise if the tolerance value is below 0.10 ( $< 0.10$ ) and the VIF value is above 10 ( $> 10$ ) then there is multicollinearity. Good research is one where multicollinearity does not occur..

Table 5. Multicollinearity Test Results  
Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	1.890	1.183		1.598	.113		
	Kualitas Produk	.184	.082	.201	2.262	.026	.435	2.300
	Harga	.110	.089	.094	1.228	.222	.586	1.705
	Citra Merek	.563	.091	.592	6.164	.000	.374	2.676

a. Dependent Variable: Keputusan Pembelian

It can be seen that multicollinearity does not occur, because the Tolerance value is  $0.435 > 0.10$  (greater), namely for the Product Quality variable, for the Price variable the Tolerance value is  $0.586 > 0.10$  (larger) and for the Brand Image variable the Tolerance value is  $0.374 > 0.10$  (greater) For a VIF value  $< 10$  each independent variable has a value of no more than 10. For the Product Quality variable, it is worth 2,300, for the Price variable, it is 1,705 and for the Brand Image variable, it is 2,676. So it can be concluded that the regression model in this study does not experience multicollinearity disorders or there is no correlation between the independent variables (independent) so that the regression model is feasible to use.

### Heteroscedasticity Test

The heteroscedasticity test was carried out to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. A good regression model is one that has homoscedasticity or does not have heteroscedasticity.

If the figure shows that the points spread randomly and are spread both above and below the number 0 on the Y axis, it can be concluded that there is no heteroscedasticity in the regression model.

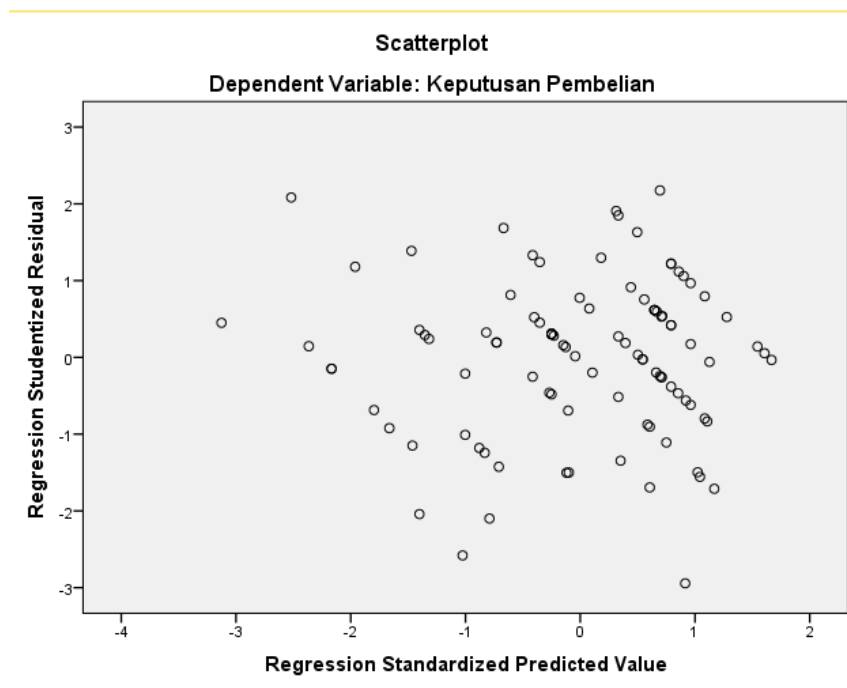


Figure 3. Calculation results of the heteroscedasticity test

Based on the graphic image of the Heteroscedasticity Test above, it can be seen that the dots spread randomly and do not form a certain pattern. It can be concluded that there is no heteroscedasticity in the regression model.

Multiple Linear Regression Test

Multiple linear regression analysis is used to influence the magnitude of the influence of Product Quality, service quality together through a multiple linear regression equation. In this study, multiple linear regression tests using SPSS version 20 showed the results of the calculations:

Table 6. Multiple Linear Regression Test Results

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	1.890	1.183	
	Kualitas Produk	.184	.082	.201
	Harga	.110	.089	.094
	Citra Merek	.563	.091	.592

a. Dependent Variable: Keputusan Pembelian

The regression equation formed in multiple linear regression analysis can be written in the form of the regression equation as follows:

$$Y = 1.890 + 0.184 X_1 + 0.110X_2 + 0.563X_3$$

The regression equation has the following meaning:

1. A constant of 1.890 states that if there are no Product Quality (X1), Price (X2), and Brand Image (X3) variables, the Purchase Decision level for Oppo Smartphone products is worth 1.890.
2. The value of the Product Quality regression coefficient (X1) is 0.184 and is positive (+) meaning that there is a positive relationship between the Product Quality variable and the Purchase Decision of Oppo Smartphone products, the higher the Product Quality, the higher the degree of Purchase Decision of Oppo Smartphone products.
3. The value of the Price regression coefficient (X2) is 0.110 and is positive (+) meaning that there is a positive relationship between the Price variable and the Purchase Decision of Oppo Smartphone products, the higher the Price, the higher the degree of Purchase Decision of Oppo Smartphone products.
4. The value of the Brand Image regression coefficient (X3) is 0.563 and is positive (+) meaning that there is a positive relationship between the Brand Image variable and the Purchase Decision of Oppo Smartphone products, the higher the Brand Image, the higher the degree of Purchase Decision of Oppo Smartphone products.

### Hypothesis testing

#### t test (Partial)

T test is used to see the effect of individual variables on the dependent variable. Thus, the effect of each variable can be compared. This test can be done by comparing t count with t table. To find out the t table value, you can look through the t table list by looking for a significant level of 0.05 and the Degree of Freedom value. In this study, the t table obtained was 1.984. Degree of Freedom (df = n - k) (100 - 4 = 96) where n is the number of samples, and k is the number of independent (X) and dependent (Y) variables.

Table 7. t test results (partial test)

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.890	1.183		1.598	.113
	Kualitas Produk	.184	.082	.201	2.262	.026
	Harga	.110	.089	.094	1.228	.222
	Citra Merek	.563	.091	.592	6.164	.000

a. Dependent Variable: Keputusan Pembelian

The results of the t test are explained as follows:

### 1) The Effect of Product Quality Variables on Oppo Smartphone Purchase Decisions

Based on the results of the T test in table 7, the t value of the Product Quality variable is 2.262. This shows that the Product Quality variable (X1) has a significant effect on the Oppo Smartphone Purchase Decision variable (Y) because the tcount value of the Product Quality variable (2.262) > t-table value (1.984) and the significant value of the Product Quality variable is 0.026 or smaller from 0.05 so that H1 is accepted.

The Product Quality variable is one of the things that influences Purchase Decisions for every consumer, Oppo must know and understand the needs and desires of its consumers, such as the Oppo smartphone can improve a high-quality operating system compared to other smartphones, this is one that drives Purchase Decisions Oppo Smartphone consumers, Oppo can attract consumers by increasing quality performance/technology and also having a more attractive and modern design. Consumers feel that Oppo Smartphone products have an attractive design no consumers can enjoy it. This is in line with the research of Setiawan and Kadarisman (2017), that Product Quality influences Purchase Decisions.

Companies must always increase consumer confidence to want to use Oppo Smartphones, both through quality improvement and several other improvements so that consumers can believe that Oppo Smartphones are very good products and will not cause doubts from consumers to use Oppo Smartphones.

### 2) The Effect of Variable Price on Oppo Smartphone Purchase Decisions

Based on the results of the T test in table 7, the tcount value of the Price variable is 1.228. This shows that the Price variable (X2) has no significant effect on the Oppo Smartphone Purchase Decision variable (Y) because the tcount value of the Price variable (1.228) < t-table value (1.984) and the significant value of the Price variable is 0.222 or greater than 0.05 so that H2 is rejected.

The price variable is what consumers pay attention to when making a purchase, if the price is too expensive compared to the benefits received, what happens is that the Oppo smartphone product has a negative value in the eyes of its consumers so that it can reduce sales of Oppo smartphones. In this study, price has no significant effect on smartphone purchase decisions. Oppo, this can affect sales of Oppo smartphones. Companies can increase consumer purchase decisions for Oppo smartphones by providing attractive promos or cashback, giving bonuses such as power banks or selfie sticks. This is in line with the research of Eva and Harti (2015) in their research entitled Effect of Product Quality and Price on the Purchase Decision of the Sony Xperia Z Series smartphone at the Plaza Marina Surabaya counter insight. That Price influences the Purchase Decision of the Sony Xperia Z Series smartphone.

### 3) The Effect of Brand Image Variable on Oppo Smartphone Purchase Decisions

Based on the results of the T test in table 6, the tcount value of the Brand Image variable is 6.164. This shows that the Brand Image variable (X3) has a significant effect on the Oppo Smartphone Purchase Decision variable (Y) because the tcount value of the Brand Image variable (6.164) > t-table value (1.984) and the significant value of the Brand Image variable is 0.000 or smaller from 0.05 so that H3 is accepted.

The company's Brand Image variable must further improve its Brand Image and the company must also always improve the quality of the company so that consumers get to know the company more and also consumers have more trust in the company, this aims to increase the level of consumer confidence when using an Oppo Smartphone. Oppo must have a good reputation, give a modern impression and have different features from other smartphones so that it can improve Purchase Decisions for Oppo Smartphones. This is in line with Luqman Arif Prakoso's research (2015), Brand Image influences the decision to buy a Samsung smartphone.

### F Test (Simultaneous)

The F test was conducted to find out whether all the independent variables simultaneously affect the dependent variable.

Tabel 8. Hasil Uji F

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	316.879	3	105.626	64.685	.000 <sup>b</sup>
	Residual	156.761	96	1.633		
	Total	473.640	99			

a. Dependent Variable: Keputusan Pembelian

b. Predictors: (Constant), Citra Merek, Harga, Kualitas Produk

The table above shows the results of the F test calculations. Obtained F count of 64.685 > F table (2.70) with a significant level of 0.000 < 0.05. Thus H<sub>0</sub> is rejected and H<sub>a</sub> is accepted, meaning that Product Quality (X<sub>1</sub>), Price (X<sub>2</sub>) and Brand Image (X<sub>3</sub>) simultaneously have a significant effect on the Purchase Decision of Oppo Smartphone products.

### Coefficient of Determination (R<sup>2</sup>)

The coefficient of determination (R<sup>2</sup>) essentially measures how far the model's ability to explain the variation in the dependent variable.

Table 9. Results of the Coefficient of Determination (R<sup>2</sup>)

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.818 <sup>a</sup>	.669	.659	1.278

a. Predictors: (Constant), Citra Merek, Harga, Kualitas Produk

b. Dependent Variable: Keputusan Pembelian

It can be seen that the Coefficient of Determination (Adjusted R Square) is 0.659 (65.9%). This shows that by using the regression model we get where the independent variables Product Quality, Price and Product Quality have an influence on the Purchase Decision of 65.9%. While the remaining 34.1% is the contribution of other variables not included in this study.

### CONCLUSION

This study aims to determine whether there is influence of Product Quality, Price and Brand Image on the Purchase Decision of Oppo smartphone products. Based on the results of the research and discussion, conclusions can be drawn according to the formulation of the problem, namely:

1. Variables Product Quality, Brand Image have an effect on the Purchase Decision of the oppo smartphone, while Price has no effect on the Purchase Decision of the OPPO smartphone.
2. The Product Quality, Price, and Brand Image variables simultaneously have a significant effect on the Oppo smartphone Purchase Decision variable (Y).

### REFERENCES

- Cleryan, dan Muhammad Edwar. 2016. "Pengaruh Product Quality dan Brand Image Terhadap Purchase Decision Handphone Merek Oppo Jenis Android. Skripsi Pendidikan Ekonomi, Universitas Negeri Surabaya.
- Danang, Sunyoto. 2013. Dasar-dasar Manajemen Pemasaran. Yogyakarta: CAPS.
- Eva Cahya, Harti, 2015. Pengaruh Product Quality Dan Price Terhadap Purchase Decision Smartphone Sony Xperia Z Series Di Counter Insight Plaza Marina Surabaya. Jurnal non publikasi
- Gifani, Auliannisa & Syahputra. 2017. "Pengaruh Brand Image Terhadap Purchase Decision Smartphone Oppo Pada Mahasiswa Universitas Telkom". Skripsi Administrasi Bisnis, Universitas Telkom.
- Ghozali, Imam. 2013. Aplikasi analisis multivariate dengan program SPSS. Edisi ketujuh. Semarang. Badan penerbit universitas Diponegoro, Semarang.
- Kotler, Philip and Armstrong, Garry. 2006. Dasar – Dasar Pemasaran. Edisi kesembilan jilid satu. Jakarta : Penerbit indeks
- Kotler, Philip dan Garry Armstrong.2001. Prinsip-prinsip Pemasaran. Jilid 2. Jakarta: Erlangga.
- Kotler, Philip dan Armstrong, dalam Yudhi. 2008. " Product Quality, Merek dan Desain Pengaruhnya Terhadap Purchase Decision Sepeda Motor Yamaha Mio". Jurnal EMBA. Vol. 1, No.3, Juni.
- Kotler, Philip dan Kevin Lane Keller. 2009. "Manajemen Pemasaran, Jilid I". Edisi ke 13. Jakarta : Erlangga.
- Luqman Arif Prakoso, 2015. Pengaruh Price, Iklan, Dan Brand Image (Brand Image) Terhadap Purchase Decision Smartphone Android Samsung Galaxy Series (Studi Kasus Pada Mahasiswa Fakultas Ekonomi dan Bisnis UMS). Universitas Muhammadiyah Surakarta. Skripsi
- Margaretta S, Febriana. 2017. "Pengaruh Product Quality dan Price Terhadap Purchase Decision Handphone Xiaomi". Skripsi Program Studi Manajemen Sekolah Tinggi Ilmu Ekonomi Pelita Bangsa.
- Mowen, John C dan Michael Minor. 2002. Perilaku Konsumen Jilid 1 edisi kelima (alih bahasa). Jakarta: Erlangga.



- Setiawan Tri, Kadarisman Hidayat. 2017. Pengaruh Product Quality Terhadap Purchase Decision Dan Dampaknya Terhadap Kepuasan Konsumen Pengguna Iphone (Survei Pada Mahasiswa Fakultas Ilmu Administrasi Universitas Brawijaya Malang) Fakultas Ilmu Administrasi Universitas Brawijaya Malang, Jurnal Administrasi Bisnis (JAB)| Vol. 50 No. 6 September 2017
- Triwahyuni, Naning. 2017. “Pengaruh Product Quality, Price dan Promosi terhadap Purchase Decision HP Oppo pada mahasiswa Fakultas Ekonomi Universitas Negeri PGRI Kediri” Skripsi Program Studi Manajemen FE Universitas Negeri PGRI Kediri.  
<https://websindo.com/indonesia-digital-2019-mobile/> diakses 2019  
<https://technologue.id/ini-jawara-pasar-smartphone-indonesia-di-q2-2019-versi-idc/amp/> diakses 2019