

THE INFLUENCE OF BRAND AWARENESS, BRAND IMAGE AND PERCEIVED QUALITY ON BRAND EQUITY SMARTPHONES (Malikussaleh University Economics and Business Student Study)

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Abstract

This research aims to analyze the influence of brand awareness, brand image and perceived quality on smartphone brand equity (Study of students at the Faculty of Economics and Business, Malikussaleh University). Data for this research was collected through a survey method using a questionnaire as a data collection instrument. The respondents used in this research were 246 students from the Faculty of Economics and Business, Malikussaleh University. This research uses a quantitative approach with multiple linear regression analysis using SPSS (Statistical Package for the Social Sciences) software. The results of the research show that Brand Awareness partially has a positive and significant effect on smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University. Brand image has a positive and significant effect on smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University. Perceived quality has a positive and significant effect on smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University. Simultaneously brand awareness, brand image and perceived quality have a positive and significant effect on smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University.

Keywords : *Brand Awareness, Brand Image, Perceived Quality, Brand Equity*

1. INTRODUCTION

Technological advances make competition between companies stronger, requiring companies to create products according to consumer desires. One of the technological developments is the development of smartphones (Semuel & Alexander, 2020). The development of smartphones continues to increase so that competition is also getting stronger. Therefore, companies must be ready to face the upcoming competition, an effective approach to win the competition is to improve brand management and try to understand the factors that influence brand equity, try to plan effective brand strategies and build great brand equity, (Hou & Wonglorsaichon, 2016).

Brand Equity is a form of consumer confidence and trust in the benefits and uses offered by a brand. Brand equity is a consideration for consumers when choosing an item. In this research, we examine smartphone brand equity which is generally the choice of consumers. Several smartphone brands that are widely used by students include Samsung, Oppo, Xiaomi, Vivo and also Lenovo. Among these brands, one brand that is generally in demand and popular with students is the Samsung brand. However, the increasing competition in the smartphone sector means that the Samsung brand tends to be lower. Based on data, the top brand Samsung is one of the TOP smartphone products, but smartphones will experience a decline, especially in 2022.

One of the factors that is thought to influence brand equity is brand awareness. Brand awareness is a person's ability to recognize or recall that a brand is part of a certain product category (Aaker, 2018). Consumers' ability to recognize or remember the brand of a product varies depending on the level of brand communication or consumer perception of the brand of product being offered. One of the factors that is thought to influence brand equity is brand awareness. Brand awareness is a person's ability to recognize or recall that a brand is part of a certain product category (Aaker, 2018). Apart from brand awareness, brand equity is also influenced by brand image. Brand image is the overall emotional image of customers about a brand and can be seen in

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isolation or in relation to other brands. Consumer attitudes and actions towards a brand image are one of the important elements that encourage consumers to buy a product (Andrenata et al., 2022). The next factor that influences brand equity is perceived quality. Perceived quality of a brand describes the customer's overall response to the superior quality offered by the brand. This response is a perception formed from the customer's experience while interacting with the brand through communication built by the marketer (Jintu et al., 2013).

2. IMPLEMENTATION METHOD

Location and Object of Research

The research location is the place or social location of the research characterized by the presence of perpetrators and other elements. Location where this research was conducted at the Faculty of Economics and Business, Malikussaleh University Undergraduate Level

Population and Sample

Population is a generalized area consisting of objects or subjects that have certain quantities and characteristics determined by researchers to be studied and then draw conclusions (Sugiyono, 2019). The population in this study is all active students at the Faculty of Economics and Business, Malikussaleh University, totaling 3,933 people. A sample is a subset of the population, consisting of several members of the population. According to Sugiyono (2016) a sample is the selection of a number of research subjects as representatives of the population so that a sample is produced that represents the population in question. Due to the population in this study of 3,933 people, the sample size was 246 people

Validity Test

The validity test is used to measure whether something is valid or not questionnaire. A questionnaire is said to be valid if the questions on the questionnaire are valid to reveal something that will be measured by the questionnaire (Ghozali, 2018). This validity test is obtained by correlating each indicator score with the total variable indicator score, then the correlation results are compared with a critical value at a significance level of 0.05.

Reability Test

According to Ghozali, (2018) Reliability is consistency and stability of the results of a certain measurement scale. Reliability Test is carried out for measuring the level of consistency between observation results and instruments or tools measurements used at different times. Technique used To measure the reliability of observations is to use coefficients Cronbach alpha, that is, an instrument is said to be reliable if it has a Cronbach value alpha is greater than 0.5. According to Ghozali, (2018), a construct or variable it is said to be reliable if it provides a Cronbach Alpha value > 0.60.

Data Analysis Methods

This study uses multiple linear regression with the following equation model :

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where :

Y : Brand Equity

α : Constant

β : Regression coefficient

X1 : Brand Awareness

X2 : Brand Image

X3 : Perceived Quality

ϵ : Error Term

Hypothesis Test

1. Parsial Test (t Test)

Partial hypothesis testing uses the t-test. Ghozali (2018) states that the t statistical test basically describes the extent of the influence of individual explanatory/independent variables in explaining the dependent variable. Ghozali (2018) explains that the t test is carried out by comparing the probability of significance with a predetermined threshold value:

If the significance probability number is > 0.05 then H_1 , H_2 , and H_3 are rejected and H_0 is accepted.

1. If the significance probability number is > 0.05 then H_1 , H_2 , and H_3 are rejected and H_0 is accepted.
2. If the significance probability number is < 0.05 then H_1 , H_2 , and H_3 are accepted and H_0 is rejected

2. Simultaneous Test (F Test)

Simultaneously, hypothesis testing is carried out using the F-test. According to Ghozali (2018), the F statistical test basically shows whether all the independent or independent variables included in the model have a joint influence on the dependent/dependent variable.

By using significance probability figures with the following conditions:

1. If the significance probability number is > 0.05 then H_1 , H_2 , and H_3 are rejected and H_0 is accepted.
2. If the significance probability number is < 0.05 then H_1 , H_2 , and H_3 are accepted and H_0 is rejected.

3. RESULTS AND DISCUSSION

Validity Test

Validity is a measure that shows the levels of validity or authenticity of an instrument. The basis for making a decision whether it is valid or not is as follows:

- If the sig value. (2-tailed) < 0.05 then the questionnaire questions are valid.
- If the sig value. (2-tailed) > 0.05 then the questionnaire question is invalid.

Tabel 1 Validity Test

No	Indikator -Indikator Pernyataan	Nilai r_{hitung}	Nilai r_{tabel}	Ket
1	Brand Awareness (X_1)			
	1. Question 1	0,805	0.113	Valid
	2. Question 2	0,683	0.113	Valid
	3. Question 3	0,827	0.113	Valid
	4. Question 4	0,774	0.113	Valid
2	Brand Image (X_2)	0,769	0.113	
	1. Question 1	0,791	0.113	Valid
	2. Question 2	0,594	0.113	Valid
	3. Question 3			Valid
3	Perceived Quality (X_3)			
	1. Question 1	0.880	0.113	Valid
	2. Question 2	0.877	0.113	Valid
	3. Question 3	0.870	0.113	Valid

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Brand Equity (Y)					
4	1.	Question 1	0.825	0.113	Valid
	2.	Question 2	0.798	0.113	Valid
	3.	Question 3	0.831	0.113	Valid
	4.	Question 4	0.774	0.113	Valid

Source: Primary Data (2023)

From the results of all the variables brand awareness (X1), brand image (X2), perceived quality (X3) and brand equity (Y). To measure the variables in this research, each of them has a large person correlation from rtable, the rtable value for $(df) = n - 2 = 246 - 2 = 244$, then the rtable value is 0.113. Based on the results in this table, it can be concluded that all statement indicators in this research are declared valid.

Reliability Test

Reliability test is used to test whether the instrument used is reliable. The test criteria are that the instrument is said to be reliable if the Cronbach's Alpha value is > 0.60 , the following is a table of reliability test results:

Tabel 2 Reability Test

Variabel	Cornbach's Alpha	Keterangan
<i>Brand Awareness (X1)</i>	0,776	Reliabel
<i>Brand image (X2)</i>	0,699	Reliabel
<i>Perceived quality (X3)</i>	0,843	Reliabel
<i>Brand equity (Y)</i>	0,821	Reliabel

Source: Primary Data (2023)

From the results of all the variable The Cornbach's Alpha value of the brand awareness variable (X1) is 0.776, the Cornbach's Alpha value of the brand image variable (X2) is 0.699, the Cornbach's Alpha value of the perceived quality variable (X3) is 0.843 and the Cornbach's Alpha value of the brand equity variable (Y) is 0.821. These results show that the Cornbach's Alpha results for each variable are > 0.60 , so all variables can be declared reliable. All of this shows that all statement items used are able to obtain consistent data.

Multiple Linear

Analysis Results The technique used in this study is a multiple linear regression equation, so the calculation results of regression analysis are obtained in the following table:

Multiple Linear Regression Test Results

Tabel 3 Multiple Linear

Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta			
(Constant)	.037	.215			.173	.862
<i>Brand Awareness</i>	.457	.073	.400		6.272	.000
<i>Brand Image</i>	.196	.068	.175		2.896	.004
<i>Perceived Quality</i>	.266	.072	.251		3.711	.000

a. Dependent Variable: *Brand Equity*

Source: Primary Data (2023)

Based on the output in Table 3 above, it can be seen that this value is obtained from the multiple linear regression analysis equation below:

1. The regression coefficient for the brand awareness variable is positive at 0.457, meaning that increasing brand awareness will increase brand equity by 0.457.
2. The regression coefficient for the brand image variable is positive at 0.196, meaning that increasing brand image will increase brand equity by 0.196.
3. The regression coefficient for the perceived quality variable has a positive value of 0.266, meaning that increasing perceived quality will increase brand equity by 0.266.

Hypothesis Testing Partial Test (t Test)

Tabel 4 Partial Test

Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta			
(Constant)	.037	.215			.173	.862
<i>Brand Awareness</i>	.457	.073	.400		6.272	.000
<i>Brand Image</i>	.196	.068	.175		2.896	.004
<i>Perceived Quality</i>	.266	.072	.251		3.711	.000

a. Dependent Variable: *Brand Equity*

Source: Primary Data (2023)

From the results of individual parameter testing (t statistical test) it can be explained as follows:

1. Partially, Brand Awareness has a positive and significant effect on smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University, where $t_{count} > t_{table}$ or $6,272 > 1,651$ with a significance level of 0.000. So it can be concluded that H1 is accepted.
2. Partially, brand image has a positive and significant effect on smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University, where $t_{count} > t_{table}$ or $2,896 > 1,651$ with a significance level of 0.004. So it can be concluded that H2 is accepted.
3. Partially, perceived quality has a positive and significant effect on smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University, where $t_{count} > t_{table}$ or $3,711 > 1,651$ with a significance level of 0.000. So it can be concluded that H3 is accepted

Simultaneous Test (F Test)

Tabel 5 Simultaneous Test

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	66.382	3	22.127	93.326	.000 ^b
Residual	57.378	242	.237		
Total	123.760	245			

a. Dependent Variable: *Brand Equity*

b. Predictors: (Constant), *Perceived Quality*, *Brand Image*, *Brand Awareness*

Source: Primary Data (2023)

From the results of SPSS data processing which is also used to see the F table value obtained from the degree of freedom (df) for the 2-way partial test on 246 samples, $df = N - k$, namely $246 - 4 = 242$ with $df_1 = 3$ and $df_2 = 242$ for hypothesis with an F value at a significance of 5% or 0.05, then the F table value obtained is 2.641. The research results show that the values of

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brand awareness, brand image and perceived quality influence smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University, so that hypothesis H4 is accepted.

Coefficient of Determination

Tabel 6 Coefficient of Determination

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.732 ^a	0.536	0.531	0.48693
b. Dependent Variable: Brand Equity				
Source: Primary Data (2023)				

Based on Table 6 above, the correlation coefficient (R) value is 0.732. This value indicates that there is a moderate relationship (correlation) between the variables brand awareness, brand image and perceived quality on brand equity. Meanwhile, the coefficient of determination (R Square) is 0.536, meaning that the variables brand awareness, brand image and perceived quality have the ability to explain their influence on brand equity by 53.6%. The remaining 46.4% was influenced by other factors outside this research.

4. CONCLUSION

From the results of this discussion, the following conclusions can be drawn:

1. Partially, Brand Awareness has a positive and significant effect on smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University, where $t_{count} > t_{table}$ or $6,272 > 1,651$ with a significance level of 0.000. So it can be concluded that H1 is accepted.
2. Partially, brand image has a positive and significant effect on smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University, where $t_{count} > t_{table}$ or $2.896 > 1,651$ with a significance level of 0.004. So it can be concluded that H2 is accepted.
3. Partially, perceived quality has a positive and significant effect on smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University, where $t_{count} > t_{table}$ or $3.711 > 1,651$ with a significance level of 0.000. So it can be concluded that H3 is accepted.
4. Simultaneously brand awareness, brand image and perceived quality have a positive and significant effect on smartphone brand equity among students at the Faculty of Economics and Business, Malikussaleh University

REFERENCES

- Adnan, A., & Abubakar, R. (2021). Manajemen Pemasaran (Dari Legacy Marketing Ke New Wave Marketing). *Sefa Bumi Persada Aceh*.
- Andrenata, A., Supeni, R. E., & Rahayu, J. (2022). Pengaruh Perceived Value , Brand Awareness , Perceived Quality Terhadap Keputusan Pembelian Smartphone Xiaomi. *Jurnal Manajemen Sumber Daya Manusia, Administrasi Dan Pelayanan Publik*, IX, 813–824.

- Assauri, S. (2019). *Manajemen Operasi Produksi*. PT. Raja Grafindo Persada.
- Eslami, S. (2020). *Pengaruh pengalaman merek terhadap ekuitas merek dan loyalitas merek melalui peran mediasi kesadaran merek , citra merek dan persepsi kualitas*. 11, 98–104.
- Gde, T., & Sukawati, R. (2019). Pengaruh Perceived Quality Dan Brand Image Terhadap Brand Loyalty Dan Brand Equity. *Ekonomi Dan Bisnis*, 8(4), 2125–2151.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS*. Badan Penerbit Universitas Diponegoro. Semarang
- Hou, C., & Wonglorsaichon, P. (2016). the Relationship Among Brand Awareness, Brand Image, Perceived Quality, Brand Trust, Brand Loyalty and Brand Equity of Customer in China'S Antivirus Software Industry. *UTCC International Journal of Business & Economics*, 8(1), 153–170.
<http://esc-web.lib.cbs.dk/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=116484624&site=ehost-live&scope=site>
- Kotler, P., & Amstrong, G. (2019). *Prinsip-Prinsip Pemasaran*. PT. Indeks. Jakarta
- Kotler, P., & Keller, K. L. (2022). *Manajemen Pemasaran*. PT. Indeks. Jakarta
- Mubarak,A., Muchsin, Edyansyah,T., Zulkarnaen, (2023). *The influence of Ptomotion, Customer Satisfaction, And Service Quality on Purchase Desicions at Alfamart Bireuen District*. *Jurnal of accounting research, Utility Finance and Digital Asset*. 2(2)
- Ramadhan, K. N., Welsa, H., & Cahyani, P. D. (2021). *Pengaruh quality service , perceived quality terhadap brand equity dengan brand image sebagai variabel intervening The effect of service quality , perceived quality on brand equity with brand image as an intervening variable*. 18(4), 621–627.
- Semuel, H., & Alexander, B. (2020). Pengaruh Brand Awareness, Brand Association, Dan Perceived Quality Terhadap Brand Loyalty Pada Produk Oppo Smartphone Di Surabaya. *Strategi Pemasaran*, 7(1), 1–8.
- Sugiyono. (2012). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Bandung: Alfabeta. *Metode Penelitian Kuantitatif, Kualitatif Dan R & D*. Bandung: Alfabeta.
<https://doi.org/10.1017/CBO9781107415324.004>
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. alfabeta.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif R&D*. Alfabeta. Bandung
- Tjiptono, F. (2019). *Strategi Pemasaran*. Yogyakarta. Cv Andi
- Wiranata, S. O., & Bernarto, I. (2021). the Influence of Brand Awareness, Perceived Quality, and Brand Image on Brand Loyalty: Brand Image As a Mediating Variable. *Indonesian Digital Marketing Journal*, 1(1), 10–19.