

THE INFLUENCE OF SERVICE QUALITY, PRICE AND BRAND IMAGE ON TELKOMSEL CUSTOMER LOYALTY OF IPB POSTGRADUATE STUDENTS

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Abstract

The study aims to determine how the influence of service quality, price, and brand image on Telkomsel customer loyalty for IPB postgraduate students and to find out the most influential variable on customer loyalty. This study used 95 students of IPB Postgraduate who have used The Telkomsel Card in The Jabodetabek area and the last two months. This study used a non-probability sampling technique with judgmental sampling. An online questionnaire collected the data with a Likert scale between 1 to 5. The multiple linear regression analysis was used to test the model. The data processing of this study used SPSS 24.0. This study with the F test has shown that the service quality, price, and brand image simultaneously can explain the variable of customer loyalty. The following result with the T-test has been demonstrated that price has a positive and significant effect on customer loyalty.

Keywords: Quality of Service, Price, Brand Image, Customer loyalty

Introduction

Human beings are increasingly required to be fast-paced and efficient as the times progress. These demands are pushing the technology to continue to evolve. Technological developments have made genuine changes in the world globally, including in the field of communication. The story of technology has created enormous opportunities in the telecommunications sector. One of them is in a telecommunications company, that is PT Telekomunikasi Seluler (Telkomsel) is required to provide services that can meet customers' wishes. Customers have their assessment of service quality, and because of that, the company should understand the customers' expectations (Dewi, 2016). Customers will be loyal to the company when the customer's wishes have been met. Customer loyalty is necessary for the company to survive because loyal customers will make purchases more than customers who are not trustworthy, less likely for loyal customers to switch to competitors (Gunawan and Beyer, 2012).

Price can be a thing that can affect customer loyalty of PT Telekomunikasi Seluler (Telkomsel). The company has determined the price. This is required to match the value given by the company to customers. Price is a marketing mix element that can generate revenue for the company (Kotler and Keller, 2008). Brand image is also one of the critical assets for PT Telekomunikasi Seluler (Telkomsel) and is obliged to continue to be built and maintained to achieve customer loyalty. Customers who have used a particular brand tend to be consistent with a brand image (Wishnu and Herman, 2011). This research was conducted to see how the influence of variables from service quality, price, and brand image on Telkomsel customer loyalty variable in IPB Postgraduate students, and what independent variables have the most effect.

Research Method

This research type is quantitative research. This research population is students of the Postgraduate School in IPB, as many as 6,304 people. Sampling techniques used, that is, judgment sampling. The number of samples was calculated using a formula by Lemeshow with $n=6.304$, $\alpha=5\%$, $Z_{(1-\alpha/2)}=1.96$, $e=10\%$ and assuming $P=0.5$, and then obtained a sample as many as 95 respondents.

The sample criteria are taken in this research: IPB Postgraduate Students who have used Telkomsel cards in the Jabodetabek area in the last two months (October 2020 - December 2020). Independent variables in this research are service quality, price, and brand image. For dependent variables in this research, customer loyalty is the research data collected through an online questionnaire with a Likert scale from points 1 to 5. Respondents' honesty when answering questions in online questionnaires is critical. The truth of the research results depends heavily on the instruments used. A test of the research instrument is needed to address this. The research instrument test contains validity tests as well as a reliability test. The validity test is to test research instruments, while the reliability test shows how far the measurements will get results that do not differ much if measured again on the same subject. If the instrument is declared valid and reliable, then the next analysis is the classical assumption test and hypothesis test. The hypothetical test in the research used multiple linear regression intending to analyze the relationship between dependent variables with independent variables, F Test, T-Test, and the percentage of Coefficient of Determination. All tests investigated using SPSS 24.0 software applications. This research used three hypotheses, that is:

- H1: The quality of service has a positive and significant effect on Telkomsel customer loyalty of IPB Postgraduate students.
- H2: Price has a positive and significant effect on Telkomsel customer loyalty of IPB Postgraduate students.
- H3: Brand Image has a positive and significant effect on Telkomsel customer loyalty of IPB Postgraduate students.

Result and Discussion

Characteristics of respondents

Table 1. Gender of The Respondent

Gender	Frequency (Person)	Percentage (%)
Male	38	40
Female	57	60
Total	95	100

Source: Primary Data, Processed 2020

The number of respondents who answered the questionnaire was recorded 40% of male respondents and 60% of female respondents.

Table 2. Age of The Respondent

Age (Years)	Frequency (Person)	Percentage (%)
17 - 21	9	9,47
22 - 26	52	54,73
27 - 31	14	14,73
32 - 36	13	13,68
37 - 41	1	1,05
> 42	6	6,31
Total	95	100

Source: Primary Data, Processed 2020

The percentage of respondents who filled out the questionnaire aged 17-21 years amounted to 9.47%, aged 22-26 years amounted to 54.73%, aged 27-31 years amounted to 14.73%, aged 32-36 years amounted to 13.68%, aged 37-41 years amounted to 1.05% and aged > 42 years is 6.31%. The majority of respondents were in the age range of 22-26 years.

Table 3. Respondents Income or Allowance per Month

Respondents Income or Allowance (Rp)	Frequency (Person)	Percentage (%)
<1.000.000	10	10,52
1.000.000-1.999.999	26	27,36
2.000.000-2.999.999	14	14,73
3.000.000-3.999.999	16	16,84
> 4.000.000	29	30,52
Total	95	100

Source: Primary Data, Processed 2020

The percentage of respondents who filled out the questionnaire with monthly income or allowance <IDR 1,000,000.00 were 10.52%, income or monthly allowance IDR 1.000.000.00 - IDR 1.999.999.00 were 27.36%, income or allowance per month. IDR 2.000.000.00 - IDR 2.999.999.00 were 14.73%, monthly income or allowance IDR 3.000.000.00 - IDR 3.999.999.00 were 16.84%, and monthly income or allowance > IDR 4.000.000.00 were 30.52%. The majority of respondents have monthly income or allowance > IDR 4.000.000.00.

Research Instrument Test

Validation level was calculated using bivariate Pearson with $\alpha = 0.05$ and $n = 95$ then obtained r_{table} as many as 0.202, the instrument is declared as valid.

Table 4. Result of The Validity Test

Question	r_{table}	$r_{statistics}$	Description
Quality of Service			
QS1	0,202	0,665	Valid
QS2	0,202	0,625	Valid
QS3	0,202	0,708	Valid
QS4	0,202	0,813	Valid
QS5	0,202	0,750	Valid
Price			
P1	0,202	0,608	Valid
P2	0,202	0,793	Valid
P3	0,202	0,786	Valid
P4	0,202	0,765	Valid
P5	0,202	0,768	Valid
Brand Image			
BI1	0,202	0,801	Valid
BI2	0,202	0,776	Valid
BI3	0,202	0,443	Valid
BI4	0,202	0,719	Valid
BI5	0,202	0,748	Valid
Customer Loyalty			
CL1	0,202	0,692	Valid
CL2	0,202	0,801	Valid
CL3	0,202	0,842	Valid

Source: Primary Data, Processed 2020

Based on the research results, all values of $r_{statistics} > r_{table}$ then all instruments X_1, X_2, X_3 and Y is declared as valid.

Table 5. Creation of The Reliability Test

Variable	Cronbach's Alpha	Critical Value	Description
Quality of Service	0.738.	0.6.	Reliable
Price	0.799.	0.6.	Reliable
Brand Image	0.730.	0.6.	Reliable
Customer Loyalty	0.675.	0.6.	Reliable

Source: Primary Data, Processed 2020

Reliability tests in this research have shown that all variables used have Cronbach's alpha value > 0.6 . Because of that, all respondents' answers in each item of the question were declared reliable.

Classical Assumption Test

A classical assumption test is required before test hypotheses. If all tests in the classical assumption test can be met, then it can be done with multiple linear regression tests.

Table 6. Results of Normality Test with Kolmogorov-Smirnov

Sig.	Critical Value	Description
0.948	0.05	Normally Distributed

Source: Primary Data, Processed 2020

The test results showed a significance value (Asymp Sig 2-tailed) of 0.948 because $0.948 > 0.05$, then the data in this research was declared to be normally distributed.

Table 7. Result of The Multicollinearity Test

Variable	VIF	Tolerance	Description
Quality of Service	1.545	0.647	Free from Multicollinearity
Price	1.563	0.640	Free from Multicollinearity
Brand Image	1.245	0.803	Free from Multicollinearity

Source: Primary Data, Processed 2020

Based on the research results on the multicollinearity test, VIF value < 5 and the tolerance value > 0.1 can be said that the variable is free from multicollinearity.

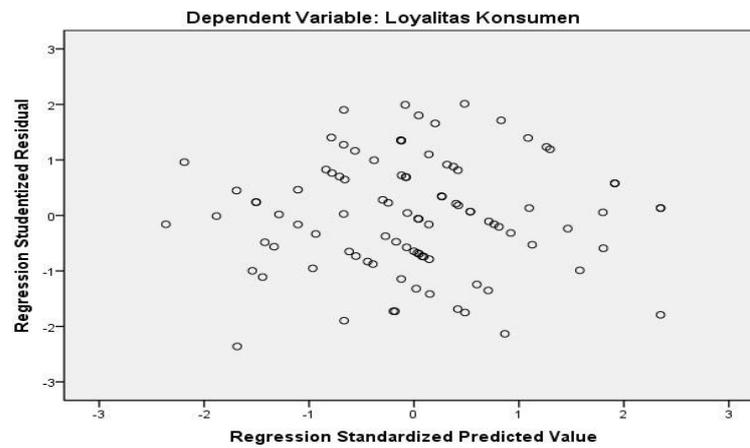


Figure 1: Scatter Plot of Heteroscedasticity

The Scatter plot in this research showed that the field spread randomly at the top and bottom of zeros on the studentized residual Regression axis. Based on the heteroscedasticity test results with the graph method, it was declared that heteroscedasticity symptoms did not occur. To get definitive results to see heteroscedasticity or not can be done with the glejser test. The result of residual abs significance > 0.05 , because of that, it can be concluded that there were no symptoms of heteroscedasticity or free from heteroscedasticity.

Table 8. Result of The Heteroscedasticity Test with Glejser Test

Variable	Abs Residual	Critical Value	Description
Quality of Service	0.214	0.05	Free from Heteroscedasticity
Price	0.416	0.05	Free from Heteroscedasticity
Brand Image	0.766	0.05	Free from Heteroscedasticity

Source: Primary Data, Processed 2020

Glejser heteroscedasticity tests showed residual abs values for X_1, X_2 and X_3 were 0.214, 0.416, 0.766, respectively. Since the entire residual abs value > 0.05 , then it can be known that the variable is free from heteroscedasticity.

Hypothesis Test

Table 9. Result of Multiple Linear Regression Analysis with SPSS

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.369	1.412		1.678	.097		
	Kualitas Layanan	.115	.063	.171	1.813	.073	.647	1.545
	Harga	.298	.053	.534	5.615	.000	.640	1.563
	Brand Image	.073	.071	.088	1.032	.305	.803	1.245

Source: Result of Processed with SPSS 24.0, 2020

Regression analysis in the research was used to see how X_1, X_2 and X_3 variables affect Y . Regression between X_1, X_2 and X_3 has produced the following equation:

$$Y = 2.369 + 0.115 X_1 + 0.298 X_2 + 0.073 X_3$$

The constant value was 2,369, which means that if the variable value of service quality, price, and brand image are considered consistent or zero, customer loyalty increases by 2,369. The independent variable regression coefficient value X_1 was 0.115, which means that if the X_1 variable increases by one unit and the other independent variable remain, the value Y will be increased by 0.115 units. The independent variable regression coefficient value X_2 was 0.298, which means that if the X_2 variable increases by one team and another independent variable remain, the value Y will be increased by 0.298 units. The independent variable regression coefficient value X_3 was 0.073, which means that if the X_3 variable increases by one team and another independent variable remain, the value Y will be increased by 0.073 units.

T-Test used $\alpha = 0.05$, $k = 3$ and $n = 95$ with t_{table} as many as 1.986 then obtained a $t_{statistics}$ value for X_1 was 1.813 and a significance value was 0.073 which means $t_{statistics} < t_{table}$ ($1.813 < 1.986$), as well as significance value, was > 0.05 ($0.073 > 0.05$) had indicated X_1 individually had no positive and significant influence on customer loyalty of IPB Postgraduate students. The amount of service quality influence on customer loyalty was 0.115 or 11.5%. $t_{statistics}$ Value for X_2 was 5.615, and the significance value was 0.000, which means $t_{statistics} > t_{table}$ ($5.615 > 1.986$) as well as the significant value was < 0.05 ($0.000 < 0.05$) has indicated X_2 individually had a positive and significant influence on customer loyalty of IPB Postgraduate students. The amount of price influence on customer loyalty was 0.298 or 29.8%. $t_{statistics}$ The value for X_3 was 1.032 and the significance value was 0.305, which means $T_{statistics} < t_{tabel}$ ($1.032 < 1.986$), as well as significance value, was > 0.05 ($0.305 < 0.05$) has indicated X_3 individually had no positive and significant influence on customer loyalty of IPB Postgraduate students. The effect of brand image on customer loyalty was 0.073 or 18.2%.

Table 10. Result of F-Test

$F_{statistics}$	F_{table}
27.372	2.704

Source: Primary Data, Processed 2020

Based on the research using $k = 3$ and $n = 95$ with a $F_{statistics}$ were 2.704 then the $F_{statistics}$ obtained was 27.372 which means $F_{statistics} > F_{table}$ ($27.372 > 2.70$) and a signification rate of $0.000 < 0.05$, and a signification rate of $0.000 < 0.05$, hence, all the effects of independent variables can be found simultaneously to explain the dependent variable of customer loyalty.

Table 11. Result of Coefficient Determination

S	R-Square	R-Square(Adj)
1.61723	47,43	45,70

Source: Primary Data, Processed 2020

Based on the research, this research's correlation value was (not exceeding half), meaning that the correlation between Y variable and X variable was less intense. X Variable simultaneously affected the Y variable by 47.43%, while other variables influenced the remaining not from in the research.

Discussion

The X_1 variable in this research partially did not have a positive and significant influence Y . These results showed that what Telkomsel customers get does not meet the expectations of Telkomsel customers. In the future, Telkomsel is expected to improve the quality of service provided to customers, and this is done so that customers feel satisfied. The findings of this research did not support the opinions expressed from previous research conducted by Dewi (2016), where the results showed that the quality of service significantly affects customer loyalty.

The X_2 variable in this research partially had a positive and significant effect Y . These results showed that the price has a positive impact when customers want to buy Telkomsel products. Low or appropriate prices greatly influence customers' decisions when purchasing products. Differences in customer characteristics will also result in different responses about the costs. Price-sensitive customers usually are satisfied with a low price because they get a high value for money. However, for those insensitive to price, this variable becomes less important or less significant in determining their satisfaction in consuming these services. The results of this research support Muhammad et al. (2020) research, where the results showed that price significantly affects customer loyalty.

The X_3 variable in this research partially did not have a positive and significant influence Y . The results of this research could be influenced by consumers who do not pay much attention to the brand image owned and offered by Telkomsel because it already has a reasonable price according to its customers. For the future, Telkomsel is expected to be more able to improve its brand image. Consumers will feel more confident in what they bought and can strengthen its bargaining position with customers. This is supported by previous research by Weenas (2013), which found that brand image does not significantly affect purchasing decisions on Spring Bed Comforta and Hadisurya products (2008) using Structural Equation Modeling (SEM); he mentioned that there is a significant influence of image to loyalty as many as 0.9.

This research's correlation value was 47,43 (not exceeding half), which means that the correlation between Y variable and X variable was less intense. X variable simultaneously affected the Y variable by 47.43%, while other variables outside the research were affecting 52.57%. These results showed that if simultaneously in X_1X_2, X_3 this research only contributed 47.43% to Y .

Conclusion

Based on the research results obtained from the testing and analysis of data partially, there is no positive and significant influence Y. The effect Y was 0.115, or 11.5%. These results showed that what Telkomsel customers get does not meet Telkomsel customers' expectations.

The X_2 variable in this research partially had a positive and significant effect on Y. The amount of X_2 influence on Y was 0.298 or 29.8%. These results showed that prices have a positive impact when customers want to buy Telkomsel products. Low or appropriate prices greatly influence customers' decisions when purchasing products.

This research partially had no positive and significant influence on Y. The amount of effect of the brand image on customer loyalty was 0.073 or 7.3%. The results of this research could be influenced by consumers who do not pay much attention to the brand image owned and offered by Telkomsel because it already has a reasonable price according to its customers.

Suggestions

Independent variables on service quality and brand image did not positively and significantly influence dependent variables. In contrast, price variables positively and affect Telkomsel customer loyalty to IPB Postgraduate students substantially. It is expected that Telkomsel will improve the quality of service and brand image.

Many factors can influence customer loyalty to buy a product. Thus, the author wishes a lot for the next research to add other independent variables to increase customer loyalty. It can also add insight for us researchers and readers and be useful for those who need it. It is hoped that this research can be used to improve insights related to service quality, price, and brand image that affect customer loyalty in IPB Postgraduate students, and it is expected that this research can be a reference in the next study.

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