

Analysis of Promotion and Service Quality on Customer Satisfaction of the State Electricity Company (PT. PLN (Persero) Customer Service Unit of Teluk Betung Sub-District, Bandar Lampung City, Lampung Province, Indonesia

Galih Tegar Wicaksono¹, Muhamad Emil Rachman²

^{1,2} Faculty of Economics and Business, Department of Management
University of Bandar Lampung

ZA. Pagar Alam Street Number.26, Labuhan Ratu, District. Kedaton, Bandar Lampung City, Lampung Province 35142

Abstract :

Promotion and Electronic Service Quality are important elements in achieving customer satisfaction. The purpose of this study was to analyze the impact of promotion and electronic service quality on customer satisfaction both individually and simultaneously. The population studied was customers of PT PLN ULP Teluk Betung who had used the PLN Mobile Application, with a total of 32,632 people. The sample selection technique used the cluster random sampling method with a total of 380 respondents, calculated using the Krejcie & Morgan formula. The results showed that: (1) promotion has a significant effect on customer satisfaction, (2) electronic service quality variables also have a significant effect on customer satisfaction, (3) simultaneous tests show that promotion and electronic service quality together have a significant effect on customer satisfaction. With the results of this study, PT PLN ULP Teluk Betung can evaluate promotional strategies and improve the quality of services provided to customers to increase their satisfaction. It is recommended to PT PLN ULP Teluk Betung to continue to improve promotions by distributing at various points and also making updates to the application to improve the quality of services provided.

Key Words : *Promotions, Eletronic Service Quality, Customer Satisfsction, The State Electricity Company.*

1. Introduction

Research Background

The fast growing technological advancement, requires some companies to continue to grow their business or provide better services for their customers. This requires providing solutions that are fast and in accordance with the needs and desires of consumers to ensure their satisfaction and loyalty to the goods or services provided.

Electricity is a basic necessity that is used daily. Everyone utilizes "electricity for various functions including lighting, industrial purposes, communication, and other activities. The State Electricity Company (PLN) is the only government-appointed institution responsible for distributing electricity to the entire population of Indonesia nationwide. The State Electricity Company (PLN) must provide the best service to ensure customer satisfaction as a provider of products and services. Customer satisfaction is very important for the existence of a company and plays an important role in shaping the company's positive reputation (Batubara, F et al, 2022).

The State Electricity Company (PLN), a State-Owned Enterprise (SOE), is authorized by the government to oversee all aspects of electricity in Indonesia. As a tangible proof of its concern for consumers, PLN launched the PLN Mobile application that can be accessed via smartphone. The application was launched on October 16, 2016 by the PLN Board of Directors to coincide with the commemoration of the 71st National Electricity Day.

PLN Mobile application is a customer self-service application that is integrated with the Integrated Complaints and Complaints Application (APKT) and the Centralized Customer Service Application (AP2T). This application allows customers to submit complaints and inquiries in an integrated manner. It offers easy access to features such as checking bills and token history, purchasing electricity tokens, new installation requests, power changes, temporary connections, checking the status of complaints and requests, the latest electricity tariff information, the latest news about PLN, electricity maintenance information, and PLN customer service center contacts. Customers can access and install the PLN Mobile application through platforms such as the Google Play Store, App Store, and other similar platforms. This is in line with the idea of Chesanti, P.C., & Setyorini, R (2018) that PLN Mobile aims to facilitate customer access to information and contact with PLN.

According to Singal, H. E., & Mandey, S. L. (2020), the success of a business is closely related to the level of customer satisfaction. Customer satisfaction provides various benefits such as improving the company's relationship with customers, encouraging repeat purchases, and generating positive word-of-mouth recommendations. As a service provider, PLN aims to increase customer satisfaction by introducing innovative online services that are user-friendly and easy to understand. Active and smart marketing promotions are expected to attract consumer interest so as to increase sales and achieve predetermined targets (Pratama, A.J., & Rachman, M.E., 2023). The PLN Mobile application is promoted through electronic and print media, as well as coming directly to customer homes. PT PLN Teluk Betung Customer Service Unit (ULP) conducts direct home promotions to introduce and assist customers in installing the PLN Mobile application. By offering attractive prizes such as tumblr bottles, electric stoves, wall clocks, magic coms, and fans with the PLN logo. According to Ani, J., Lumanauw, B., & Tampenawas, J.L.A (2021), promotion is the act of persuading, informing, and influencing consumers to buy or use a product or service. Service quality has a significant effect on customer satisfaction and desire. The purpose of service quality is to build or increase consumer trust and satisfaction with the services offered. Optimal service is determined by consumer assessments of service quality and the value they receive. When service exceeds customer expectations, it can be said that the quality is very good (Ramanda Fichan, M., & Tiara Narundana, V, 2022). With the PLN Mobile application, it is hoped that customers will be increasingly assisted in accessing and obtaining services provided by PLN.

Customer satisfaction can be influenced by promotion and service quality (Christy & Rustam, 2020 in Purnamayanti, P.R., & Heryanda, K.K., 2023). The State Electricity Company (PLN) aims to promote its services to ensure customer satisfaction by providing high-quality electronic services that meet consumer needs.

From the previous explanation, it can be seen that promotion and electronic service quality have an important role in creating customer satisfaction. Therefore, this study chose the title "Analysis Of Promotion And Service Quality On Customer Satisfaction Of The State Electricity Company (PT. PLN (Persero) Customer Service Unit Of Teluk Betung Sub-District, Bandar Lampung City, Lampung Province, Indonesia."

Research Objectives

This study aims to; 1) to determine whether promotion and electronic service quality have a simultaneous influence on customer satisfaction at The State Electricity Company (PT PLN ULP Teluk Betung) , 2) to determine whether the promotion of the PLN Mobile application has a partial impact on customer satisfaction, 3) to determine whether the quality of electronic services in the PLN Mobile application has a partial effect on customer satisfaction. As such, this research aims to increase understanding of the aspects that influence customer satisfaction in the era of electronic services.

Research Benefits

This research has many diverse benefits. First, it examines the elements that affect customer satisfaction at The State Electricity Company (PT PLN ULP Teluk Betung) in detail. This allows for a more efficient way to improve customer satisfaction by focusing on the correlation between promotion and e-service quality.

Secondly, this research provides comprehensive insight into how the promotion of the PLN Mobile application affects customer satisfaction, thus enabling organizations to improve promotions to improve results. Evaluating the quality of e-services in the PLN Mobile application can assist companies in determining areas that need to be improved to increase overall customer satisfaction.

In addition, it enhances academic understanding of marketing strategies and e-services and can

serve as a resource for future studies. Finally, increased customer satisfaction is expected to improve consumer perception and loyalty, as well as improve the company's performance and competitiveness in an increasingly competitive market.

2. Literature Review

Kotler and Keller (2016) in Mamonto .F.W, Tumbuan .W.J.F.A & Rogi .M.H (2021) define marketing management as a strategic process for identifying target markets, attracting, retaining, and expanding the client base through the delivery of greater customer value. Marketing management is very important for companies because it allows them to understand market conditions and determine the optimal approach to providing products or services to consumers.

Kotler and Keller (2016) in Willy .W (2018) define consumer behavior as an examination of how individuals, organizations, and groups behave when buying, selecting, and utilizing concepts, goods, and services to meet customer needs and desires. The consumer behavior approach emphasizes that marketing prioritizes customer-centric strategies rather than focusing solely on selling company products. Consumer behavior influences customer purchasing decisions. Consumers prioritize consideration of the goods and services they want to buy before making a decision. Consumer behavior in purchasing decisions is usually influenced by several aspects including price, quality, and product functionality.

Promotion according to Tjiptono (2015) in Ribka Lengkey, G., L.Mandey, S., & Soepono, D (2022) is a marketing element that aims to communicate information, convince, and remind consumers about the company's brands and products.

Colier and Bienstock (2006) in Teofilus & Trisya.R (2016) define e-service quality as consumers' evaluation of the effectiveness and results of problem solving, which is the basis for assessing the services offered. Electronic service quality includes various aspects of service quality, utilizing the internet to improve the transaction process and ensure consumer satisfaction.

Consumer satisfaction according to Kotler and Keller (2016) in Musyafa.N & Ngatno (2019) is the degree of satisfaction or dissatisfaction that a person experiences after evaluating a product or service based on his expectations. Customer satisfaction is the perspective that results from the experience of using a particular product or service.

Previous Research

Fatimah Batubara's research (2022) entitled "The Effect of Electronic Service Quality and PLN Mobile Application Promotion on Customer Satisfaction of PT PLN (Persero) ULP Sibuhuan" found that service quality and electronic promotion have a significant effect on customer satisfaction of PT PLN Sibuhuan, with a significance value of 0.000. The t test shows that the quality of electronic services has a major effect on the happiness of PT PLN Sibuhuan customers with a p-value of 0.000. Likewise, promotion also has a significant effect on customer satisfaction of PT PLN Sibuhuan with a p-value of 0.000. The R2 value shows a strong relationship of 81.9% between the two variables, and the remaining 18.1% is influenced by other variables. Gloria Ribka Lengkey and Silvy L. Mandey's research (2022) on the Effect of Promotion and Electronic Service Quality on the PLN Mobile Application on Customer Satisfaction of PT PLN (Persero) Tomohon Customer Service Unit revealed that promotion has no significant effect on customer satisfaction because the t value of 1.351 is lower than the t table. Meanwhile, the electronic service quality variable has a significant effect on customer satisfaction with a t value of 8.663 exceeding the t table value. The combined analysis of promotion and electronic service quality variables shows a significant influence on customer satisfaction as indicated by an F value of 62.198.

Fadillah's research (2017) on the Effect of Electronic Service Quality, Customer Value, and Trust on Consumer Satisfaction found that electronic service quality has a significant effect on customer satisfaction, with a t value of 2.907. Customer value has a significant effect on customer satisfaction with a t value of 3.949. Trust has a significant effect on customer satisfaction with a t value of 2.522. "Electronic service quality, customer value, and trust together have a significant effect on customer satisfaction with an F value of 20.759

3. Research Methods

Type, Place and Time of Research

This research is categorized as associative research that examines causal relationships. Associative techniques are used in this context to explore the relationship between observed variables to ascertain the existence of causality or causal relationships. This study aims to determine whether changes in one variable have a direct impact on changes in other variables. (Sugiyono, 2019 as cited in Hermawan, T.F., 2020).

The research was conducted in Teluk Betung District, especially for customers The State Electricity Company (PT PLN ULP Teluk Betung). The research was conducted from September 22 to December 4, 2023.

Population and Samples

The population is focused on customers of The State Electricity Company (PT PLN ULP Teluk Betung) who utilize the PLN Mobile application in Teluk Betung District, totaling 32,632 customers. The sampling methodology used is Cluster Random Sampling, which is used to select samples from large and diverse populations such as in countries, provinces, or districts. 380 respondents were obtained as a sample based on calculations using the Krejcie & Morgan formula.

The calculation formula is as follows :

Description :	$n = \frac{\chi^2 \cdot N \cdot P (1 - P)}{(N - 1) \cdot d^2 + \chi^2 \cdot P (1 - P)}$
n = sample size	
N = population size	
χ^2 = Chi squared value	$n = \frac{3,841 \times 32.632 (0,5 \times 0,5)}{(32.632 - 1) \times 0,05^2 + 3,841 (0,5 \times 0,5)}$
P = population proportion	
d = estimation error	$n = \frac{3,841 \times 32.632 (0,25)}{(32.632 - 1) \times 0,0025 + 3,841 (0,25)}$
	$n = 379,64299$
	$n = 380$

Data Analysis Methods and Techniques

The analysis methods used are Validity Test, Reliability Test, and Classical Assumption Test. Data analysis includes Multiple Linear Regression, Coefficient of Determination (R²), and Correlation Analysis. The t test is used for partial hypothesis testing, while the F test is used for simultaneous hypothesis testing.

Multiple linear regression analysis was performed to assess the relationship between the dependent variable and the independent variable using multiple linear regression models. Data was analyzed using SPSS software version 25. T

The regression equation used in the investigation is as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + e$$

Description :

- Y = Customer Satisfaction
- a = Constant
- b₁ = Regression Coefficient Promotion
- b₂ = Regression Coefficient of Electronic Service Quality
- X₁ = Promotion
- X₂ = Electronic Service Quality
- e = Standard error

Conceptual Framework

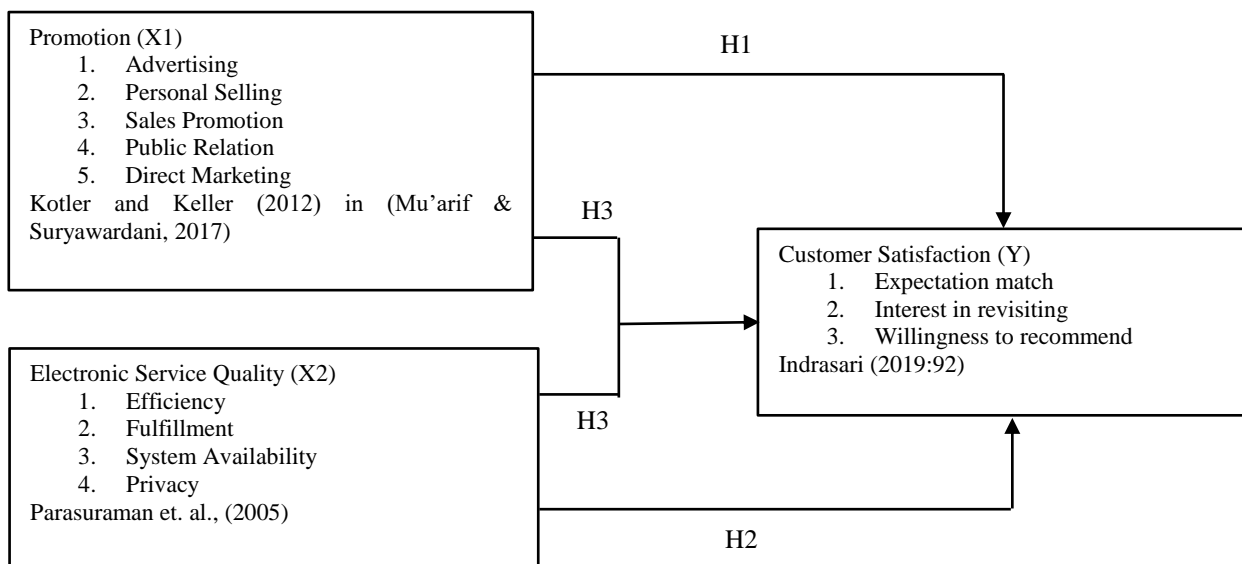


Figure.1 Conceptual Framework

- H-1 : It is suspected that Promotion has a partial influence on Customer Satisfaction of PLN Mobile Application users of The State Electricity Company (PT PLN ULP Teluk Betung).
- H-2 : It is suspected that the Quality of Electronic Services has a partial influence on Customer Satisfaction of PLN Mobile Application users of The State Electricity Company (PT PLN ULP Teluk Betung).
- H-3 : It is suspected that Promotion and Electronic Service Quality have a simultaneous influence on Customer Satisfaction of PLN Mobile application users The State Electricity Company (PT PLN ULP Teluk Betung).

4. Research Results And Discussion

Research Results

Table 1. Data Tabulation X1

NO	ITEMS	5	%	4	%	3	%	2	%	1	%	SCORE
		F		F		F		F		F		
1	X1.1	15	15%	20	20%	11	11%	4	4%	0	0%	196
2	X1.2	10	10%	22	22%	12	12%	6	6%	0	0%	186
3	X1.3	10	10%	25	25%	12	12%	3	3%	0	0%	192
4	X1.4	13	13%	21	21%	10	10%	6	6%	0	0%	191
5	X1.5	10	10%	26	26%	9	9%	5	5%	0	0%	191
6	X1.6	12	12%	21	21%	14	14%	3	3%	0	0%	192
7	X1.7	8	8%	25	25%	10	10%	7	7%	0	0%	184

Based on Table 1, it shows that the highest score is obtained from item X1.1 with an advertising indicator. Thus, it is concluded that advertising has an important role in encouraging the promotional factors of the PLN Mobile application.

Table 2. X2 Data Tabulation

NO	ITEMS	5	%	4	%	3	%	2	%	1	%	SCORE
		F		F		F		F		F		
1	X2.1	28	28%	18	18%	4	4%	0	0%	0	0%	224
2	X2.2	19	19%	28	28%	2	2%	1	1%	0	0%	215

3	X2.3	16	16%	27	27%	6	6%	1	1%	0	0%	208
4	X2.4	11	11%	31	31%	7	7%	1	1%	0	0%	202
5	X2.5	12	12%	19	19%	12	12%	7	7%	0	0%	186
6	X2.6	14	14%	29	29%	7	7%	0	0%	0	0%	207
7	X2.7	19	19%	21	21%	10	10%	0	0%	0	0%	209
8	X2.8	19	19%	27	27%	4	4%	0	0%	0	0%	215
9	X2.9	11	11%	21	21%	15	15%	2	2%	1	1%	189
10	X2.10	14	14%	22	22%	13	13%	1	1%	0	0%	199

Based on Table 2, it shows that the highest score is achieved by item X2.1 with an efficiency indicator. This states that the quality of service in the PLN Mobile application is considered efficient in providing convenience for customers.

Table 3. Y Data Tabulation

NO	ITEMS	5	%	4	%	3	%	2	%	1	%	SCORE
		F		F		F		F		F		
1	Y1.1	18	18%	28	28%	4	4%	0	0%	0	0%	214
2	Y1.2	13	13%	29	29%	7	7%	1	1%	0	0%	204
3	Y1.3	11	11%	26	26%	10	10%	3	3%	0	0%	195
4	Y1.4	11	11%	25	25%	13	13%	1	1%	0	0%	196
5	Y1.5	11	11%	30	30%	9	9%	0	0%	0	0%	202
6	Y1.6	14	14%	27	27%	8	8%	1	1%	0	0%	204

Based on Table 3, it shows that the highest score is achieved by item Y1.1 with the indicator of conformity of expectations. Thus, it is concluded that customer satisfaction has been fulfilled by matching the expectations of The State Electricity Company (PT PLN ULP Teluk Betung).consumers.

a. Validity Test

Sugiyono (2017: 125) defines the validity test as a measure of how close the data collected from the research subject is to the actual data. This validity test is designed to evaluate the accuracy and reliability of data obtained from research, especially from measuring instruments such as questionnaires.

Table 4. Validity Test

Variables	Statements	Perarson Correlatio n (r counts)	r table	Sig	Alpha	Stat u s
	X1.1	0,767	0,2353	0,00	0,05	Vali d
	X1.2	0,649	0,2353	0,00	0,05	Vali d
Promotion (X1)	X1.3	0,687	0,2353	0,00	0,05	Vali d
	X1.4	0,553	0,2353	0,00	0,05	Vali d
	X1.5	0,551	0,2353	0,00	0,05	Vali d
	X1.6	0,568	0,2353	0,00	0,05	Vali d
	X1.7	0,536	0,2353	0,00	0,05	Vali d
	X2.1	0,341	0,2353	0,00	0,05	Vali d
Electronic Ser-	X2.2	0,5	0,2353	0,00	0,05	Vali

vice Quality (X2)		99				d
	X2.3	0,684	0,2353	0,00	0,05	Valid
	X2.4	0,734	0,2353	0,00	0,05	Valid
	X2.5	0,727	0,2353	0,00	0,05	Valid
	X2.6	0,754	0,2353	0,00	0,05	Valid
	X2.7	0,654	0,2353	0,00	0,05	Valid
	X2.8	0,709	0,2353	0,00	0,05	Valid
	X2.9	0,644	0,2353	0,00	0,05	Valid
	X2.10	0,741	0,2353	0,00	0,05	Valid
Customer Satisfaction (Y)	Y1.1	0,635	0,2353	0,00	0,05	Valid
	Y1.2	0,768	0,2353	0,00	0,05	Valid
	Y1.3	0,753	0,2353	0,00	0,05	Valid
	Y1.4	0,713	0,2353	0,00	0,05	Valid
	Y1.5	0,789	0,2353	0,00	0,05	Valid
	Y1.6	0,778	0,2353	0,00	0,05	Valid

Source: SPSS 25 processed data, 2023

Table 4 shows the correlation coefficient value, namely 7 statements relating to the promotion variable (X1), 10 statements for the electronic service quality variable (X2), and 6 statements for the customer satisfaction variable (Y), all of which show a calculated r value greater than the r table (0.2353), so it can be concluded that the data is valid.

b. Reliability Test

Reliability testing assesses the consistency of measurement findings obtained from the same object, resulting in similar data (Sugiyono, 2017: 130).

Table 5. Reliability Test

Variabel	Cronbach's Alpha	Description
Promotion	0,847	Reliable
Electronic Service Quality	0,899	Reliable
Customer Satisfaction	0,912	Reliable

Source: SPSS 25 processed data, 2023

In table 5, all statements related to promotion variables, electronic service quality, and customer satisfaction have a Cronbach's Alpha (α) value greater than 0.60. Each statement item in this study is considered to have good reliability and is considered suitable for research purposes.

2. Classic Assumption Test

Classical assumption testing is an important stage in multiple linear regression analysis using the Ordinary Least Square (OLS) method. OLS involves one dependent variable and several independent variables. Ghozali (2018: 159) states that to evaluate the suitability of the model, it is necessary to test many classical assumptions such as normality, multicollinearity, and heteroscedasticity.

a. Normality Test

The normality test assesses whether the residuals in the regression model are normally distributed. A normal distribution of the residual data indicates a high quality regression model. The normality distribution of residuals can be assessed using the Kolmogorov-Smirnov (K-S) non-parametric statistical test provided in the SPSS software. Data is considered to follow a normal distribution if the significance value of the test results exceeds 0.05. (Ghozali, 2018: 161-167).

Table 6. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		50
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.19116338
Most Extreme Differences	Absolute	.132
	Positive	.118
	Negative	-.132
Test Statistic		.132
Asymp. Sig. (2-tailed)		.030 ^c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: SPSS 25 Processed Data, 2023

The significance value from table 6 of 0.30 shows greater than 0.05. Therefore, it can be concluded that the data is normally distributed.

b. Multicollinearity Test

The multicollinearity test assesses whether there is a correlation between independent variables in a regression model. An ideal regression model shows no relationship between independent variables and has no symptoms of multicollinearity. Identification of multicollinearity symptoms involves monitoring the Variance Inflation Factor (VIF) and Tolerance levels. Tolerance measures the amount of variability of a variable that is not accounted for by other independent variables. The symptoms of multicollinearity are indicated by a VIF score below 10.00 and a Tolerance value above 0.10 (Ghozali, 2018: 107).

Table 7. Multicollinearity Test

Coefficient ^a		
Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Promotion	,642	1,557
Electronic Service Quality	,642	1,557

Source: SPSS 25 processed data, 2023

The data in table 7 shows the VIF value is below 10 and the tolerance value exceeds 0.1. Therefore, it can be concluded that there are no signs of multicollinearity in this study.

c. Heteroscedasticity Test

The heteroscedasticity test is conducted to assess whether there is a variation in residual variance between different observations in the regression model (Ghozali, 2018: 120). This test can be done by looking at the scatterplot graph between SRESID and ZPRED to find out if there is a special pattern. Decisions are made based on the following criteria:

1. Identifying a consistent wave pattern or variation in the width of the residual distribution over time in the scatter plot indicates the presence of heteroscedasticity.
2. If the scatterplot displays a random distribution of dots above and below the 0 value on the Y axis without a visible pattern, then it indicates the absence of heteroscedasticity" (Ghozali, 2018: 137-138).

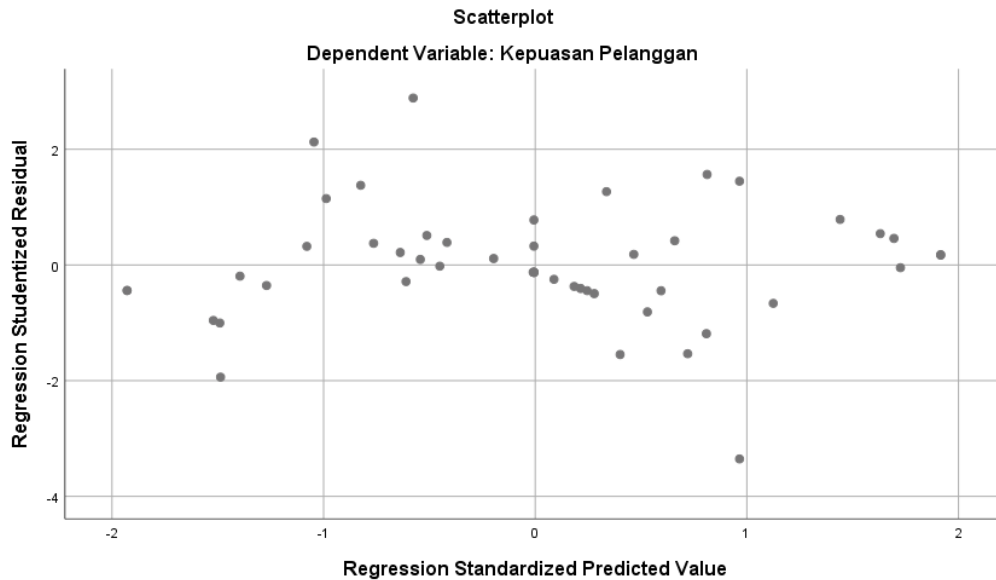


Figure 2. Heteroscedasticity Test
 Source: SPSS 25 processed data, 2023

From the scatterplot graph shown in Figure 2, it can be concluded that the data is randomly scattered above and below the 0 (zero) value on the Y-axis, and there is no consistent pattern in the distribution of the data. Therefore, it can be concluded that there is no heteroscedasticity in the regression equation model.

3. Hypothesis Testing

a. F-Test

Sugiyono (2014: 96) states that the F test is used to assess the collective impact of independent variables. A model is considered feasible if the F significance value is less than or equal to the alpha level of 0.05.

Table 8. F-Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	379.241	2	189.621	37.882	.000 ^b
	Residual	235.259	47	5.006		
	Total	614.500	49			
a. Dependent Variable: Customer Satisfaction						
b. Predictors: (Constant), Electronic Service Quality, Promotion						

Source: SPSS 25 data processing results, 2023

The significance value of the effect of Promotion (X1) and Electronic Service Quality (X2) on Customer Satisfaction is 0.000, which is less than 0.05. The estimated F table value of 37.882 is greater than the F table value of 3.20 as shown in Table 8. The Nol Hypothesis (Ho3) is rejected and the Alternative Hypothesis (Ha3) is accepted, indicating that there is an influence of Promotion (X1) and Electronic Service Quality (X2) on Customer Satisfaction (Y).

b. T-Test

Sugiyono (2014: 213) explains that the T test is used to test hypotheses regarding the relationship between two or more variables in the presence of controlled variables. If the significance value is less than 0.05 and the regression coefficient is in accordance with the hypothesis, the hypothesis is accepted.

Table 9. T-Test Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.892	2.504		1.155	.254
	Promotion	.264	.088	.339	3.012	.004
	Electronic Service Quality	.350	.074	.534	4.742	.000

a. Dependent Variable: Customer Satisfaction

Source: SPSS 25 data processing results, 2023

Based on the calculation results from table 9, the result is obtained :

1. The t value of the Promotion variable (X1) of 3.012 is more than the t table value of 2.012 at a significance level of 0.004 < 0.05. The zero hypothesis (Ho) is rejected, this shows that Promotion (X1) has a significant effect on Customer Satisfaction (Y) so that the alternative hypothesis (Ha) is accepted.
2. The calculated t value of the Electronic Service Quality variable (X2) of 4.742 exceeds the t table value of 2.012 at a significance level of 0.000 < 0.05. This indicates the rejection of the zero hypothesis (Ho) that Electronic Service Quality has a significant effect on Customer Satisfaction (Y), so that the alternative hypothesis (Ha) is accepted.

4. Multiple Linear Regression Analysis

Sugiyono (2014: 277) states that multiple regression analysis is used to anticipate how the dependent variable will behave when two or more independent variables are used as predictors. In this research, multiple linear regression tests were used to assess how the independent variables (promotion and electronic service quality) affect the dependent variable (customer satisfaction).

Table 10. Multiple Linear Regression

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.892	2.504		1.155	.254
	Promotion	.264	.088	.339	3.012	.004
	Electronic Service Quality	.350	.074	.534	4.742	.000

a. Dependent Variable: Customer Satisfaction

Source: SPSS 25 data processing results, 2023

From the results of table 10, the multiple linear regression equation is obtained as follows :

$$Y = 2,892 + 0,264X_1 + 0,350X_2 + e$$

Based on the multiple linear regression equation, when Promotion and Electronic Service Quality are both zero, the average Customer Satisfaction is estimated at 2,892 units. The regression coefficient of each independent variable is positively correlated with Customer Satisfaction, indicating a unidirectional relationship between Promotion, Electronic Service Quality, and Customer Satisfaction.

a. Correlation Coefficient (R)

Correlation coefficient analysis assesses the direction and degree of relationship between two or more variables. The direction of the relationship can be positive or negative, and its strength is determined by the correlation coefficient value (Sugiyono, 2018).

The correlation coefficient (r) measures the degree of correlation between the independent and dependent variables. The value of the correlation coefficient ranges from -1 to +1, giving rise to several possibilities:

- a. A positive sign indicates a positive correlation between the evaluated variables, indicating that any change in the value of one variable is related to a change in the other variable.
- b. A negative sign indicates a negative correlation between variables, where an increase in one variable results in a decrease in the other variable, and vice versa. An r result close to -1 or equal to -1 indicates a weak negative correlation between the variables under study.
- c. If the r value is 0 or around 0, it means that the correlation between the variables studied is weak or nonexistent.

b. Coefficient of Determination (R²)

The coefficient of determination (R²) assesses how well the model is able to account for variations in the dependent variable. The coefficient of determination ranges from 0 to 1. A lower value indicates that the model has little explanatory power for variations in the dependent variable, while a value close to 1 indicates that the independent variable is the main source of information for predicting variations in the dependent variable (Ghozali, 2018: 97). The determination analysis in this study tries to evaluate the extent to which independent factors can cause variations in the dependent variable.

Table 11. Correlation Coefficient (R) and Coefficient of Determination (R²)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.786 ^a	.617	.601	2.237
a. Predictors: (Constant), Electronic Service Quality, Promotion b. Dependent Variable: Customer Satisfaction				

Source: SPSS 25 data processing results, 2023

Table 11 shows a correlation coefficient of 0.786 between the independent and dependent variables. The positive correlation coefficient indicates that there is a significant and one-way correlation between the variables Promotion and Electronic Service Quality with Customer Satisfaction, this indicates that the greater the value of the independent variable, the value of the dependent variable also increases. The Adjusted R² value of 0.617 means that 61.7% of the variation in the dependent variable can be explained by the independent variables evaluated. The remaining 38.3% is caused by additional factors not included in this research.

Discussion Of The Research

The F test results explain that Promotion and Electronic Service Quality have a simultaneous influence on Customer Satisfaction. Effective advertising and high quality services on the PLN Mobile Application lead to increased customer satisfaction at PT PLN (Persero) ULP Teluk Betung. This finding is in line with research conducted by Gloria Ribka Lengkey and Silvy L. Mandey in 2022 on the Effect of Promotion and Electronic Service Quality on PLN Mobile Application on Customer Satisfaction of PT PLN (Persero) ULP Tomohon. This research shows that promotion and electronic service quality are important factors in increasing customer satisfaction.

The results of the multiple linear regression test show that the linear regression coefficient of promotion has a positive effect on the level of customer satisfaction of PT PLN (Persero) ULP Teluk Betung. Therefore, it can be concluded that the H1 hypothesis is supported, which states that the promotion regression coefficient in the PLN Mobile application has a significant effect on customer satisfaction at PT PLN (Persero) ULP Teluk Betung. Fatimah Batubara's research (2022) on "The Effect of Electronic Service Quality, PLN Mobile Application Promotion on Customer Satisfaction of PT PLN (Persero) ULP Sibuhuan" is in line with these findings, showing that promotion has a significant impact on customer satisfaction.

This study revealed a favorable and significant correlation between e-service quality and customer satisfaction. Higher electronic service quality causes customer satisfaction to increase, while lower service quality causes customer satisfaction to decrease. This research is in line with Fadillah's 2017 research on the Effect of Electronic Service Quality, Customer Value, and Trust on Consumer Satisfaction. The results show that electronic service quality has a significant impact on customer satisfaction.

5. Conclusions And Advice

Conclusions

Conclusions can be drawn from the results of the study and analysis. Individually, promotion has a major influence on customer satisfaction in using the PLN Mobile Application. Promotion can increase customer service awareness directly leading to higher customer satisfaction. Second, the quality of electronic services has a major impact on customer satisfaction of PLN Mobile application users. This shows that the quality of electronic services has a significant impact on consumer perceptions and satisfaction. Third, the F test results show that the independent variables of promotion and electronic service quality together have a considerable influence on the dependent variable of customer satisfaction. Effective promotion combined with strong e-service quality can have a major impact on overall customer satisfaction. It is important for companies to not only prioritize promotions but also improve the quality of electronic services to optimize customer satisfaction when using the PLN Mobile application.

Advice

The research findings provide recommendations for PT PLN ULP Teluk Betung to improve service quality and customer satisfaction with the PLN Mobile application. Efforts made must focus on expanding the scope of promotion through increased innovation in the Teluk Betung area. This is intended to increase customer knowledge of the PLN Mobile application, with the hope that it can have a positive influence on the level of customer satisfaction. In addition, companies need to consistently improve the quality of electronic service applications. Companies can improve service quality and adapt to future customer demand by consistently updating and improving their operations. It is recommended to conduct additional studies that are more thorough and detailed. This study shows that about 61.7% of other variables affect customer satisfaction with the PLN Mobile application.

Additional research is needed to gain a deeper understanding of these aspects, therefore allowing the company to implement more effective strategies to improve overall customer satisfaction. The implementation of such suggestions aims to help The State Electricity Company (PT PLN ULP Teluk Betung) improve its performance and services in the ever-evolving era of electronic services.

References

1. Ani, J., Lumanauw, B., & Tampenawas, J. L. A. (2021). Pengaruh Citra Merek, Promosi Dan Kualitas Layanan Terhadap Keputusan Pembelian Konsumen Pada E-Commerce Tokopedia Di Kota Manado the Influence of Brand Image, Promotion and Service Quality on Consumer Purchase Decisions on Tokopedia E-Commerce in Manado. *663 Jurnal EMBA*, 9(2), 663–674.
2. Apriliani, M. R. (2018). *Pengaruh E – Service Quality Terhadap Perceived Value Dan Dampaknya Terhadap Customer Satisfaction*. 1–192.
3. Aryanto, U. (2018). Bab III - Metode Penelitian Metode Penelitian. *Metode Penelitian*, 1, 32–41.
4. Batubara, F., Manurung, J. S., & ... (2022). Pengaruh Kualitas pelayanan Elektronik, Promosi Aplikasi Pln-Mobile Terhadap Kepuasan pelanggan Pt. Pln (Persero) Ulp *Nasional Social & ...*, 71–82.
<https://ojs.polmed.ac.id/index.php/KONSEP2021/article/view/882%0Ahttp://ojs.polmed.ac.id/index.php/KONSEP2021/article/download/882/419>
5. Chesanti, P. C., & Setyorini, R. (2018). Pengaruh E-Service Quality Terhadap Kepuasan pelanggan Sebagai Pengguna Aplikasi PLNMobile. *Jurnal Penelitian Pendidikan*, 18(1), 10–17.
<https://doi.org/10.17509/jpp.v18i1.11064>
6. Hidayati, I. R. (2020). Pengaruh Kepercayaan Pelanggan, Kualitas pelayanan Elektronik, Dan Promosi Pada Aplikasi PLNMobile Terhadap Kepuasan pelanggan Pt. Pln Distribusi Jawa Timur Di Surabaya. *JEM17: Jurnal Ekonomi Manajemen*, 3(2), 75–104.
<https://doi.org/10.30996/jem17.v3i2.3459>
7. Kusumawati, N. A. (2021). “PENGARUH IMPORTANCE LOCATION, STORE ATMOSPHERE, DAN PROMOTION TERHADAP KEPUTUSAN PEMBELIAN PAKAIAN DI DISTRO DIVINE CLOTH PONOROGO” (Studi Kasus pada Pelanggan Distro Divine Cloth Ponorogo). *pengertian Promosi*, 4(1), 1–23.
8. Leonardo, B. R., Wenas, R. S., & Poluan, J. G. (2021). Pengaruh Kualitas Produk, Promosi Dan Harga Terhadap Kepuasan pelanggan Di Marketplace Shopee Pada Saat Pandemi Covid-19 (Studi Pada Mahasiswa Fakultas Ekonomi Dan Bisnis Unsrat). *Jurnal EMBA : Jurnal Riset Ekonomi*,

- Manajemen, Bisnis dan Akuntansi*, 9(3), 1721–1730.
9. Lestari, N. 2019. (2019). Universitas Bung Hatta. Sumatera, Jl Karang, Ulak Utara, Padang Syaputra, Riki, 6–7. <http://repo.bunghatta.ac.id/3293/3/36> ARIF MURANDA 1510017411019 BAB I.pdf
 10. Mamonto, Tumbuan, & Rogi. (2021). Analisis Faktor-Faktor Bauran Pemasaran (4P) Terhadap Keputusan Pembelian Pada Rumah Makan Podomoro Poigar Di Era Normal Baru. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 9(2), 110–121.
 11. Mensah, J., Oppong, P. K., & Addae, M. (2022). Effect of Packaging on Perceived Quality and Brand Loyalty: The Mediating Role of Brand Association in Over-the-Counter Market. *Open Journal of Business and Management*, 10(01), 297–313. <https://doi.org/10.4236/ojbm.2022.101018>
 12. Musyaffa, N., & Ngatno. (2019). Pengaruh Harga dan Kualitas pelayanan Terhadap Loyalitas Pelanggan Melalui Kepuasan Konsumen sebagai Variabel Mediasi (Studi Kasus pada Penumpang Kereta Api Kelas Eksekutif Argo Sindoro PT. KAI DAOP IV Semarang). *Jurnal Ilmu Administrasi Bisnis*, 8(4), 1–10.
 13. Nawangsari, S., Clara, D. A., & Wibowo, E. P. (2020). The Effect of Electronic Service Quality, Product, Price, Promotion On Customer Satisfaction (Case Study On Customer Online Stores Lazada.Co.Id Jakarta). *APTIKOM Journal on Computer Science and Information Technologies*, 5(1), 1–8. <https://doi.org/10.34306/csit.v5i1.115>
 14. NS Ramadhini. (2022). Indikator kepuasan pelanggan. *Journal ilmiah*, 10–23. <http://repository.stei.ac.id/7345/3/%28BAB%2029.pdf>
 15. Nur, L. Z., Prihartini, E., & Alviani, R. (2022). Pengaruh Customer Relationship Marketing Dan Kualitas pelayanan Terhadap Loyalitas Pelanggan (Studi pada Klinik Kecantikan dr. Amalia Di Sumedang). *Entrepreneur: Jurnal Bisnis Manajemen dan Kewirausahaan*, 3(1), 378–390. <http://ejournal.unma.ac.id/index.php/entrepreneur>
 16. Oktri. (2020). Metode Penelitian. *Metode Penelitian*, 32–41. <http://repository.stei.ac.id/2078/3/BAB%203.pdf>
 17. Penelitian, K., Penggunaan, P., Pada, K., & Buah, A. (2012). *Lampiran 1 kuesioner penelitian hubungan konsep*. 80–85.
 18. Prasetio, R., & Laturette, K. (2017). Pengaruh Bauran Pemasaran Terhadap Keputusan Pembelian Pada Bisnis Chepito Tour & Travel. *Jurnal Manajemen dan Start-Up Bisnis*, 2(3), 335–341.
 19. Pratama, A. J., & Rachman, M. E. (2023). Analisis Marketing Mix Terhadap Target Penjualan Kafe DR. Koffie. *Jurnal EMT KITA*, 7(4), 1258–1265. <https://doi.org/10.35870/emt.v7i4.1640>
 20. Purnamayanti, P. R., & Heryanda, K. K. (2023). Pengaruh Promosi dan Kualitas pelayanan Elektronik “Aku Online” terhadap Kepuasan Masyarakat pada Kantor Dinas Kependudukan dan Pencatatan Sipil Pemerintah Kabupaten Buleleng. *Bisma: Jurnal Manajemen*, 9(2), 225–232. <https://doi.org/10.23887/bjm.v9i2.61218>
 21. Rahmah, N. (2021). *Bagi Hasil dan Pendapatan terhadap Keputusan Menabung pada Bank*. i, 131–193.
 22. Ramanda Fichan, M., & Tiara Narundana, V. (2022). Pengaruh Kualitas pelayanan Dan Keamanan, Terhadap Kepuasan Konsumen Pengguna Ojek Online di Bandar Lampung. *SINOMIKA Journal: Publikasi Ilmiah Bidang Ekonomi dan Akuntansi*, 1(3), 635–644. <https://doi.org/10.54443/sinomika.v1i3.328>
 23. Rambe M. (2018). *Pengaruh kualitas produk dan harga terhadap keputusan pembelian sepeda motor Yamaha New V-ixion di Percut Sei Tuan*. 9–28.
 24. Ribka Lengkey, G., L.Mandey, S., & Soepono, D. (2022). Pengaruh Promosi Dan Kualitas pelayanan Elektronik Terhadap Kepuasan pelanggan Pengguna Aplikasi PLN Mobile Pelanggan PT PLN (Persero) Unit Layanan Pelanggan Tomohon. *Jurnal EMBA*, 4(5), 62–71.
 25. Septiati, S. S. (2022). Program studi manajemen fakultas ilmu sosial humaniora. *Pengaruh Promosi Dan Kualitas pelayanan Terhadap Keputusan Konsumen Dalam Menggunakan Layanan Grabfood Di Kota Batam*.
 26. Singal, H. E., & Mandey, S. L. (2020). Pengaruh Customer Service Quality, Empahty, Promotion, Value Added Service Terhadap Kepuasan Kunsumen Pada Honda Martadinata Manado the Effect of Customer Service Quality, Empahty, Promotion, Value Added Service on Consumer Satisfaction in Honda Martadina. *Soepeno... 106 Jurnal EMBA*, 8(1), 106–115.
 27. Teofilus, T., & Trisya, R. (2017). Pengaruh Dimensi Kualitas Layanan Elektronik Terhadap Nilai

- Jasa yang Diterima dan Kepuasan Konsumen (Studi Empiris: Aplikasi GO-JEK). *Jurnal Entrepreneur dan Entrepreneurship*, 5(1), 33–44. <https://doi.org/10.37715/jee.v5i1.385>
28. Wahyuni, E. T. (2020). Flypaper Effect Pada Pendapatab Asli Daerah Dan Dana Alokasi Umum Terhadap Pengalokasian Anggaran Belanja Daerah Di Indoensia Pada Tahun 2018 Flypaper Effect on Original Regional Income and General Allocation Funds Towards the Allocation of Regional Expen. *Skripsi STIE Indonesia Jakarta*, 32–41. <http://repository.stei.ac.id/id/eprint/2227>
 29. Willy, W. (2018). Analisis Fashion Brand Terhadap Perilaku Konsumen Wanita Pengguna Sosial Media Di Surabaya Barat. *PERFORMA: Jurnal Manajemen dan Start-Up Bisnis*, 3(1), 130.
 30. Windha Trisetya, W., Imelda, A., & Jayanti Apri, E. (2020). Pengaruh Kualitaspelayanan, Kepuasan Konsumen dan Promosi Terhadap Loyalitas Pelanggan The Media Hotel & Towers Jakarta. *Jurnal Akuntansi dan Manajemen*, 17(02), 39–47.
 31. Yulia, Y. (2019). Strategi yang digunakan dalam penelitian ini adalah Strategi Asosiatif. *Repositori STEI, 2007*, 45–61.