

Analysis Of Promotion And Service Quality On Customer Loyalty At Pln Tanjung Pura Ulp Mediated By Customer Satisfaction In The Use Of Pln Mobile Application

Taufik Harijanto¹, Toyib Daulay², Desy Astuti³, Elfitra Desy Surya⁴, Mesra B⁵

Department of Magister Management, Universitas Pembangunan Panca Budi, Indonesia

(email: taufikharijanto@gmail.com)

Abstract

This research investigates the impact of promotion, service quality, and emotional bonding on customer loyalty at PLN Tanjung Pura ULP, mediated by customer satisfaction through the PLN Mobile application. Utilizing a quantitative approach with structural equation modeling, the study reveals that promotion and service quality significantly influence customer satisfaction, subsequently affecting customer loyalty. The findings emphasize the importance of effective promotional strategies, high service quality, and emotional connections in enhancing customer satisfaction and loyalty. Recommendations include promoting PLN Mobile adoption through step-by-step guidance, improving service quality through employee training and customer feedback, and fostering emotional bonds with special offers for loyal users. Overall, the study highlights the interconnected dynamics shaping customer loyalty in the context of PLN Mobile usage.

Keywords:

Customer Loyalty, Promotion, Service Quality, Customer Satisfaction, PLN Mobile.

Introduction

PT. Perusahaan Listrik Negara (Persero), commonly known as PLN, is a state-owned enterprise in Indonesia engaged in the electricity sector. By the end of 2021, PLN managed several power plants with a total installed capacity of 64,553 MW. As the sole company tasked by the government to provide electricity nationwide, PLN strives to create new strategies and innovations to satisfy customers and improve service. In the current era of rapid technological development, particularly in information and communication technology, the use of smartphones and Android devices has become ubiquitous. The PLN Mobile Application, officially launched on October 31, 2016, is a significant innovation designed to enhance customer experience. Developed in collaboration with PT Indonesia Comnet Plus, a subsidiary of PLN Mobile, the application offers customer self-service features integrated with a Complaint and Feedback Unified Application (APKT) and a Centralized Customer Service Application (AP2T).



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This study addresses various customer issues, including inaccurate meter reading, unclear information about power outages, lengthy payment queues, and the constant threat of power disconnection. To address these challenges, the PLN Mobile Application plays a crucial role in providing a convenient platform for customers to lodge complaints, access information, and perform various transactions related to their electricity consumption. The research focuses on the impact of promotion and service quality on customer loyalty, with satisfaction in using the PLN Mobile Application as a mediating factor. The study aims to investigate the correlation between these variables and their influence on customer satisfaction and loyalty.

Based on the outlined background issues, several problem identifications can be made, namely, inaccurate meter readings recorded by personnel, which is frequently complained about. Unclear information about power outages leading to customer dissatisfaction. Lengthy queues in the payment system, causing significant time wastage. Customers consistently facing the threat of power disconnection, with no tolerance for swift issue resolution, significantly disrupting their comfort. Based on the above identifications, the author limits the scope of the problems to remain focused on the core issues to achieve the desired outcomes. Thus, the author confines the issues to the variables of Promotion, Service Quality, , Customer Loyalty, and Satisfaction in using the PLN Mobile Application at PLN ULP Tanjung Pura.

Problem formulation in this research:

1. Does Promotion have a positive and significant impact on Customer Satisfaction in using the PLN Mobile Application at PLN ULP Tanjung Pura?
2. Does Service Quality have a positive and significant impact on Customer Satisfaction in using the PLN Mobile Application at PLN ULP Tanjung Pura?
3. Do Promotion and Service Quality have a positive and significant impact on Customer Satisfaction in using the PLN Mobile Application at PLN ULP Tanjung Pura?
4. Does Customer Satisfaction have a positive and significant impact on Customer Loyalty in using the PLN Mobile Application at PLN ULP Tanjung Pura?
5. Does Promotion have a positive and significant impact on Customer Loyalty in using the PLN Mobile Application at PLN ULP Tanjung Pura?
6. Does Promotion have a positive and significant impact on Customer Loyalty through Customer Satisfaction in using the PLN Mobile Application at PLN ULP Tanjung Pura?
7. Does Service Quality have a positive and significant impact on Customer Loyalty through Customer Satisfaction in using the PLN Mobile Application at PLN ULP Tanjung Pura?

Customer Loyalty

The process of becoming a loyal customer involves a series of stages that unfold over a specific period. Each stage has different needs, and each customer requires appropriate emphasis and attention. According to Kotler and Keller (2016), customer



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loyalty can be defined as "a deep-seated commitment to repurchase or re-endorse a favored product or service in the future, even though situational influences and marketing efforts may potentially lead customers to switch." Meanwhile, Gremler and Brown (2017) define customer loyalty as "customers who not only repurchase a good or service but also have commitment and a positive attitude toward the service provider, such as recommending others to make a purchase." In summary, customer loyalty is an attitude that drives behavior to make purchases from a company. According to Kotler and Keller (2016), there are several indicators of customer loyalty that can be identified. In the marketing context, these indicators include: (1) Repeat Purchase (2) Retention (3) Referrals (4) Advocacy (5) Customer Lifetime Value.

Customer Satisfaction

Customer satisfaction is the feeling of pleasure or disappointment that arises after comparing the performance (outcome) of a product thought to the expected performance (Kotler, 2017). Customer satisfaction is the result of the comparison between the expectations of a product or service and the reality received by an individual. The definition of customer satisfaction formulated by Tjiptono (2020) is the customer's response to the fulfillment of their needs. This means an assessment of a product or service's performance or the product/service itself.

It indicates the consumer's readiness to revisit or reuse a related service. Willingness to recommend represents the consumer's openness to recommending the experienced service to friends and family. According to Tjiptono (2020), the indicators forming consumer satisfaction consist of (1) Expectation Suitability, (2) Willingness to Revisit (3) Willingness to Recommend

Promotion

Promotion is a form of communication that provides convincing explanations to potential consumers about goods and services (Baker, 2021). According to Cole (2017), Promotion is sales and marketing activities aimed at informing and stimulating demand for products, services, and ideas from a company by influencing consumers to purchase the products and services produced by the company. According to Buchari Alma (2018), the indicators of promotion are as follows: (1) Advertising, (2) Personal selling, (3) Sales promotions, (4) Public relations, (5) Direct marketing.

Service Quality

In the business context, the success and quality of a company are not only measured by its products or services but also heavily influenced by the company's ability to provide services to customers. This is emphasized by Lupiyoadi (2019), stating that services play a crucial role in determining the reputation and success of a company. Service quality refers to the extent to which a service meets or exceeds customer expectations (Lupiyoadi, 2019). In service management literature, service quality encompasses several dimensions such as reliability, responsiveness, tangibles, assurance, and empathy.



Tjiptono (2020) states that service quality is an effort to fulfill customer needs and desires, as well as the accuracy of delivery in balancing customer expectations. According to Parasuraman et al. (2015) as cited in Tjiptono (2020), there are 22 determinants of service quality summarized into five dominant factors, better known as ServQual (Service Quality), which are reliability, responsiveness, assurance, empathy, and tangibles. The indicators of service quality are as follows: reliability, responsiveness, assurance, empathy, and tangibles.

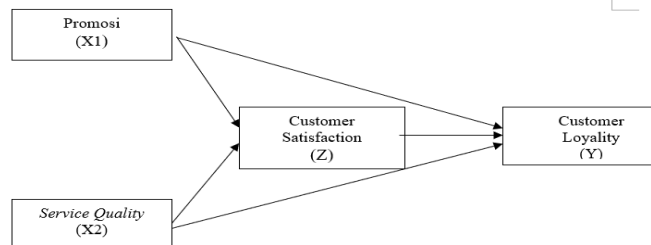


Figure 1.1 Conceptual Framework Diagram.

Hypothesis in this research

1. Promotion has a positive and significant impact on Customer Satisfaction in using the PLN Mobile Application at PLN ULP Tanjung Pura.
2. Service Quality has a positive and significant impact on Customer Satisfaction in using the PLN Mobile Application at PLN ULP Tanjung Pura.
3. Promotion and Service Quality together have a positive and significant impact on Customer Satisfaction in using the PLN Mobile Application at PLN ULP Tanjung Pura.
4. Customer Satisfaction has a positive and significant impact on Customer Loyalty in using the PLN Mobile Application at PLN ULP Tanjung Pura.
5. Promotion has a positive and significant impact on Customer Loyalty in using the PLN Mobile Application at PLN ULP Tanjung Pura.
6. Promotion has a positive and significant impact on Customer Loyalty through Customer Satisfaction in using the PLN Mobile Application at PLN ULP Tanjung Pura.
7. Service Quality has a positive and significant impact on Customer Loyalty through Customer Satisfaction in using the PLN Mobile Application at PLN ULP Tanjung Pura.

Research Methodology

The research conducted in this study is quantitative research with a descriptive approach, as defined by Sugiyono (2016). The research was carried out at PT. PLN (PERSERO) ULP Tanjung Pura, Jl. Pemuda No. 63, Pekan Tanjung Pura, Kecamatan Tanjung Pura, Kabupaten Langkat, North Sumatra 20853. The population in this study is the customers of PT. PLN (PERSERO) ULP Tanjung Pura and its surrounding areas. The determination of the sample size was done using the formula by Hair et al., (2013).



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According to Hair et al., (2017), the recommended sample size ranges between 100-200 respondents, which can be adjusted based on the number of indicators used in the questionnaire, assuming 5-10 times the number of indicators. In this study, the number of indicators used is 26 indicators. Therefore, this research uses the Hair formula:

- 5×26 to 10×26 samples
- $5 \times 26 = 130$ to $10 \times 26 = 260$ samples

Based on the calculation above, the minimum sample limit is 130, up to a maximum of 260 samples. Thus, the researcher can adjust it to the research conditions using the assumption of 7 times the number of indicators or 182 respondents, rounded to 185 respondents, which is considered sufficient to represent the population. The dependent variable (Y) in this study is Customer Loyalty. The independent variables (X) in this study are Promotion, Service Quality. The intervening variable (Z) in this study is Customer Satisfaction. Each item in the questionnaire has a gradation from very positive to very negative. Generally, the Likert scale includes answer choices: strongly agree, agree, neutral, disagree, and strongly disagree. The scores given are 5, 4, 3, 2, 1.

In this research, data analysis is conducted using Structural Equation Modeling 4 (SEM) with the Smart Partial Least Squares (PLS) method. PLS is a component-based or variance-based SEM model, enabling the simultaneous testing of complex relationships (Ghozali & Latan, 2015). SEM analysis with PLS is carried out in three main stages :

1. Outer Model Analysis
Evaluation of the measurement model to predict the relationship between indicators or parameters with latent variables. This involves testing the validity and reliability of indicators.
2. Inner Model Analysis
Evaluation of the structural model to predict the causality relationships between latent variables. At this stage, the relationships between constructs are tested.
3. Hypothesis Testing
Using SEM-PLS to test the hypotheses proposed in the study.

Result

Outer Model Evaluation (Validity and Reliability Testing)

Convergent validity, part of the outer model, is assessed through confirmatory factor analysis (CFA). For reflective constructs, loadings above 0.7 and significant p-values (<0.05) are sought (Hair et al. 2017). However, flexibility is allowed, considering that loadings between 0.40 and 0.70 may be retained if they contribute to the model. Indicators below 0.40 are removed, while those between 0.40 and 0.70 are considered for removal if their exclusion improves average variance extracted (AVE) and composite reliability beyond the thresholds (0.50 for AVE, 0.7 for composite reliability).



Retaining indicators with lower loadings is possible if they enhance the content validity of the construct. Table 3.1 displays loading values for each indicator."

Table 3.1 Factor Loading-Based Validity Testing

	Kepuasan Pelanggan (Z)	Loyalitas Pelanggan (Y)	Promosi (X1)	ServQual (X2)
KEP1	0,947			
KEP2	0,955			
KEP3	0,953			
KEP4	0,937			
KEP5	0,960			
LOY1		0,927		
LOY2		0,949		
LOY3		0,955		
LOY4		0,940		
LOY5		0,979		
LOY6		0,974		
PRO1			0,895	
PRO2			0,942	
PRO3			0,874	
PRO4			0,934	
PRO5			0,908	
PRO6			0,926	
PRO7			0,926	
SQL1				0,935
SQL2				0,961
SQL3				0,962
SQL4				0,967
SQL5				0,962

Based on the validity testing of factor loadings in Table3.1, it is evident that all loading values are > 0.7 , indicating compliance with validity requirements based on loading values."

The recommended AVE value is above 0.5 ((Hair et al. 2017). It is noted that all AVE values are > 0.5 , indicating that it has fulfilled the validity criteria based on AVE. Subsequently, reliability testing is conducted based on the composite reliability (CR) values. In Table 3.2, the AVE results are presented.

Table 3.2 Validation Testing based on Average Variance Extracted (AVE)

	Average variance extracted (AVE)
Customer Satisfaction (Z)	0,897
Customer Loyalty (Y)	0,837
Promotion (X1)	0,838
ServQual (X2)	0,905

The recommended value for CR is above 0.7 (Ghozali & Latan, 2015). It is known that all CR values are > 0.7 , indicating that it has met the reliability requirements based on CR. In Table 3.3 the CR results are presented.

Table 3.3 Testing Reliability based on Composite Reliability (CR)

	Composite reliability (rho_c)
Customer Satisfaction (Z)	0,978



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Customer Loyalty (Y)	0,968
Promotion (X1)	0,973
ServQual (X2)	0,980

The recommended value for CA is above 0.7 (Ghozali & Latan, 2015). It is known that all CA values are > 0.7, indicating that it has met the reliability criteria based on cronbach's alpha. Furthermore, discriminant validity testing is conducted using the Fornell-Larcker criteria approach. In the discriminant validity test, the square root of AVE for a latent variable is compared to the correlation value between that latent variable and other latent variables. It is observed that the square root of AVE for each latent variable is greater than the correlation value between that latent variable and other latent variables. Thus, it can be concluded that it has met the discriminant validity criteria.

Table 3.4 Discriminant Validity Test

	Customer Satisfaction (Z)	Customer Loyalty (Y)	Promotion (X1)	ServQual (X2)
Customer Satisfaction (Z)	0,947			
Customer Loyalty (Y)	0,712	0,915		
Promotion (X1)	0,830	0,776	0,915	
ServQual (X2)	0,821	0,789	0,899	0,952

In the discriminant validity test, the square root of AVE for a latent variable is compared to the correlation value between that latent variable and other latent variables. It is noted that the square root of AVE for each latent variable is greater than the correlation value between that latent variable and other latent variables. Thus, it can be concluded that it has met the discriminant validity criteria.

Table 3.5 Path coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Customer Satisfaction (Z) -> Customer Loyalty (Y)	0,834	0,834	0,026	31,877	0,000
Promtion (X1) -> Customer Satisfaction (Z)	0,171	0,187	0,096	1,789	0,006
Promtion (X1) -> Customer Loyalty (Y)	0,143	0,156	0,081	1,776	0,000
ServQual (X2) -> Customer Satisfaction (Z)	0,210	0,204	0,152	1,879	0,001
ServQual (X2) -> Customer Loyalty (Y)	0,175	0,170	0,127	1,881	0,016

Significance Test of Influence (Bootstrapping/Hypothesis Testing).

Based on the direct testing results in Table 3.5, the following outcomes were obtained:



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1. Promotion (X1) has a positive and significant impact on Customer Satisfaction (Z), with a path coefficient value (Original Sample column) of 0.171, and a P-Values = 0.006.
2. Service Quality (X2) has a positive and significant impact on Customer Satisfaction (Z), with a path coefficient value (Original Sample column) of 0.210, and a P-Values = 0.001.
3. Promotion (X1) and Service Quality have a positive and significant impact on Customer Satisfaction (Z), with all path coefficient values (Original Sample column) being positive, and P-Values = below 0.05.
4. Customer Satisfaction (Z) has a positive and significant impact on Customer Loyalty (Y), with a path coefficient value (Original Sample column) of 0.834, and P-Values = 0.000.
5. Promotion (X1) has a positive and significant impact on Customer Loyalty (Y) with a path coefficient value (Original Sample column) of 0.143, and P-Values = 0.000.

Table 3.6 Specific indirect effects

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
ServQual (X2) -> Customer Satisfaction (Z) -> Customer Loyalty (Y)	0,175	0,170	0,127	1,881	0,000
Promotion (X1) -> Customer Satisfaction (Z) -> Customer Loyalty (Y)	0,143	0,156	0,081	1,776	0,006

Based on the results of the indirect effect testing in Table 3.6, the following results were obtained:

1. Promotion (X1) has a positive and significant effect on Customer Loyalty (Y) through Customer Satisfaction (Z), with a path coefficient value (Original Sample column) of 0.143 and a P-Values = 0.006.
2. Service Quality (X2) has a positive and significant effect on Customer Loyalty (Y) through Customer Satisfaction (Z), with a path coefficient value (Original Sample column) of 0.175 and a P-Values = 0.000.

Table 3.7 R Square Value

	R-square	R-square adjusted
Customer Satisfaction (Z)	0,728	0,724
Cutsomer Loyalty (Y)	0,508	0,505

Coefficient of Determination (R2).



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The R Square value for Customer Loyalty (Y) is 0.508. Since $R^2 = 0.508 > 0$, it is concluded that Promotion (X1), Service Quality (X2), and Customer Satisfaction (Z) are relevant predictors for Customer Loyalty (Y). The R Square value for Customer Satisfaction (Z) is 0.724. Since $R^2 = 0.724 > 0$, it is concluded that Promotion (X1) and Service Quality (X2) towards Customer Satisfaction (Z) are relevant predictors for Customer Loyalty.

Table 3.7 Goodness of Fit Model

	Saturated model	Estimated model
SRMR	0.035	0.083
d_ULS	2,232	4,457
d_G	3,024	3,163
Chi-square	2319,226	2361,988
NFI	0,778	0,774

Based on the goodness-of-fit testing using SRMR, the SRMR value is 0.035, which is less than 0.1. Therefore, it is concluded that the model fits well.

Discussion

1. Promotion (X1) and Customer Satisfaction (Z). There is a positive and significant influence between promotion and customer satisfaction (path coefficient 0.171, P-Value 0.006). This implies that effective promotional efforts in PLN Mobile, such as advertising and special offers, contribute positively to customer satisfaction.
2. Service Quality (X2) and Customer Satisfaction (Z). There is a positive and significant influence between service quality and customer satisfaction (path coefficient 0.210, P-Value 0.001). The results indicate that providing high-quality services by PLN Mobile positively contributes to customer satisfaction.
3. Promotion (X1) and Service Quality,) to Customer Satisfaction (Z). There is a positive and significant influence of promotion, service quality, and emotional attachment on customer satisfaction (all P-Values < 0.05). Effective promotional strategies, high-quality services, and emotional relationships with customers collectively contribute to customer satisfaction (Novanti et al, 2018)
4. Influence of Customer Satisfaction (H5) on Customer Loyalty. There is a significant positive influence of customer satisfaction (Z) on customer loyalty (Y) with a path coefficient of 0.834 (P-Value 0.000). The study suggests that higher customer satisfaction levels contribute to increased customer loyalty.
5. Influence of Promotion (H6) on Customer Loyalty. There is a positive and significant influence of promotion (X1) on customer loyalty (Y) with a path coefficient of 0.143 and a low P-Value of 0.000. Effective promotional strategies contribute positively to customer loyalty (Ismail, 2023)



6. Influence of Promotion (H8) on Customer Loyalty through Customer Satisfaction. Promotion (X1) has a positive and significant influence on customer loyalty (Y) through customer satisfaction (Z) with a path coefficient of 0.143 and a P-Value of 0.006. Effective promotions indirectly enhance customer loyalty by increasing customer satisfaction.
7. Influence of Service Quality (H9) on Customer Loyalty through Customer Satisfaction/ Service quality (X2) has a positive and significant influence on customer loyalty (Y) through customer satisfaction (Z) with a path coefficient of 0.175 and a low P-Value of 0.000. High service quality indirectly contributes to customer loyalty by enhancing customer satisfaction (Taufik et al, 2022).

Conclusion And Recommendations

The study underscores the pivotal role of customer satisfaction as a linchpin connecting various factors influencing customer loyalty in the context of PLN Mobile at ULP Tanjung Pura. Key findings include the positive and significant impact of promotional activities and service quality on customer loyalty, both directly and indirectly through the mediation of customer satisfaction.

To increase the adoption of PLN Mobile for customers who have not used the application before, it is recommended to follow these steps: download the app, register an account, link the electricity account, explore app features, gain knowledge about electricity tariffs, monitor electricity usage, set up bill reminders, and ensure account security. Enhancing Service Quality involves regular training for staff interacting with customers and utilizing customer feedback for continuous improvement. Building emotional bonds can be achieved through more emotional communication and special offers for loyal users. Customer satisfaction can be improved by addressing complaints promptly and implementing loyalty programs, while introducing attractive loyalty programs with rewards or discounts can further enhance user loyalty through continuous communication and exclusive offers.

References

- Baker, M. (2021). The marketing book. Routledge.
- Buchari Alma. (2018). Manajemen Pemasaran dan Pemasaran Jasa. Bandung.
- Cole, D. (2017). The complete guide to book marketing. Simon and Schuster.
- Ghozali, I., & Latan, H. (2015). Konsep, teknik, aplikasi menggunakan Smart PLS 3.0 untuk penelitian empiris. BP Undip. Semarang, 290.
- Gremler dan Brown. (2017). Service Loyalty: Its Nature, Importance, and Implications. Journal of Marketing. European



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- Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017) A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). 2nd Edition, Sage Publications Inc., Thousand Oaks, CA.
- Ismail, I. J. (2023). Speaking to the hearts of the customers! The mediating effect of customer loyalty on customer orientation, technology orientation and business performance. *Technological Sustainability*, 2(1), 44-66.
- Kotler, P. (2017). Marketing for competitiveness. Bentang Pustaka.
- Kotler, P. and Keller, Kevin L. 2016:.Marketing Management, 15th Edition New. Jersey: Pearson Pretice Hall, Inc
- Lupiyoadi. (2019). Manajemen Pemasaran Jasa. Edisi I. Salemba Empat: Jakarta.
- Novianti, N., Endri, E., & Darlius, D. (2018). Kepuasan Pelanggan Memediasi Pengaruh Kualitas Pelayanan Dan Promosi Terhadap Loyalitas Pelanggan. IX: Jurnal Ilmiah Manajemen,
- Taufik, A., Santoso, S., Fahmi, M. I., Restuanto, F., & Yamin, S. (2022). The role of service and product quality on customer loyalty. *Journal of Consumer Sciences*, 7(1), 68-82.
- Tjiptono, F. (2020). Strategi pemasaran: prinsip dan penerapan. Yogyakarta: Andi.
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (2015). Delivering quality service: Balancing customer perceptions and expectations. Simon and Schuster.