

The Influence of Service Quality and Product Quality Towards Customer Loyalty to Customers Business at PT XYZ

Eva Kurniasih¹

¹ Faculty Economics and Business, Atmajaya Catholic University of Indonesia

Corresponding Author : Eva Kurniasih, Email: eva_kurniasih@yahoo.com

Article Info

Article history:

Received 10/11/2025

Revised 21/11/2025

Accepted 15/12/2025

Keywords:

Service Quality, Product Quality, Customer Loyalty

ABSTRACT

This study aims to examine the direct influence of service quality and product quality on customer loyalty. The data used are primary data, obtained from business customers, namely the supply chain management (procurement) division and the engineering division at XYZ company. Sampling of 50 respondents was carried out using the census method. As for hypothesis testing, the Structural Equation Model-Partial Least Square (SEM-PLS) approach was used with the measurement model using the Smart PLS version 3 program. The findings of this study are that service quality is proven to have a direct influence on customer loyalty. Then Product quality has been proven to have a direct influence on customer loyalty. Can concluded that customer loyalty capable influenced by variables service quality and product quality in a way partial.



©2025 Authors. Published by PT. Great Performance Consulting. This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. (<https://creativecommons.org/licenses/by-nc/4.0/>)

INTRODUCTION

The steel industry, especially steel pipes, is a part of the basic metal industry, which is included in the upstream industry and is one of the strategic industries in Indonesia and is included in the business to business (B2B) industry. This sector plays a major role in supplying vital raw materials for development in various fields such as infrastructure, the oil and gas industry, capital goods production and transportation equipment. The rapid industrial development in Indonesia requires the availability of large enough industrial raw materials. Steel production is not limited to types of steel such as hot rolled coil, cold rolled coil, but also to the production of high-value steel such as spiral pipes, pipes with joints/Electrical Resistance Welded (ERW), seamless pipes/seams commonly used in the water, oil and gas, petrochemical and infrastructure sectors (Tubindo, 2021). To meet the need for premium class pipes, especially seamless pipes in the oil and gas industry, especially drilling and crude oil production, currently only two (2) local manufacturers can produce them, namely PT ABC and PT XYZ. Both manufacturers have nearly identical production capabilities and capacities, supported by capital investment from major world-class European manufacturers, including investment funds, supporting machinery, and high-quality green pipes that have been well-known in the global seamless pipe industry for hundreds of years (Tubindo, 2021).

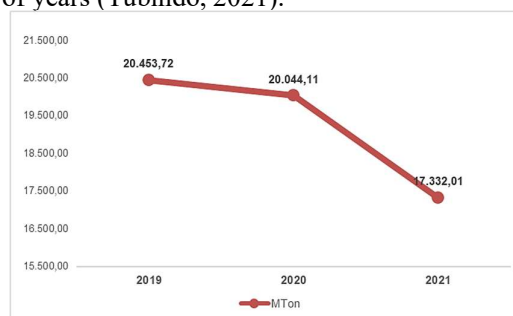


Figure 1. XYZ Sales Data for 2019-2021

Source: PT. XYZ (2025)

Domestic sales in 2021 reached 17,332.01 Mt. This indicates that PT XYZ sales decreased by almost 14% due to the impact of the Covid-19 pandemic. The pandemic resulted in delayed projects, resulting in decreased revenue. One way for a company to survive and compete is by maintaining and improving the quality of its products and services. The higher the quality, the higher the level of customer satisfaction. The B2B industry, such as that operated by PT XYZ, is a challenging business with limited competitors and limited quality. Companies are required to maintain customer trust by improving product and service quality to increase customer satisfaction. They also carefully determine customer needs as an effort to meet desires and increase satisfaction with the products and services provided. However, the current level of customer satisfaction at PT XYZ is not optimal, as evidenced by the increasing percentage of customer complaints over the past three years, as shown in the following figure.

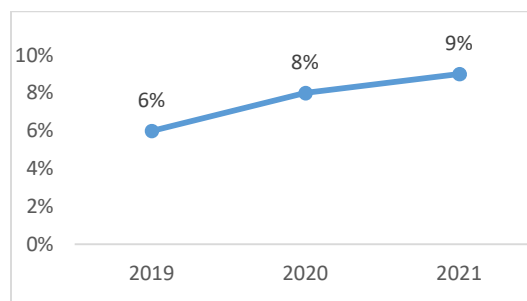


Figure 2. PT XYZ Customer Complaint Data 2019-2021

Source: PT XYZ (2025)

The quality of service provided is also one of the main keys to a company's success in creating customer loyalty. If the quality of service provided by the company is in accordance with expectations and performance, consumers will be happy because the expectations and performance of the service are good and consumer loyalty will immediately arise to the company (Mahsyar & Surapati, 2020). In addition to being reviewed from the quality of service, another factor that can influence customer loyalty is product quality. According to Kotler & Keller (2012), product quality is a set of characteristics of goods and services that have the ability to meet needs, which is a combination of understanding the reliability, accuracy, comfort, maintenance, and other attributes of a product. If consumers are satisfied with a product purchased, it will create customer loyalty so that buyers make repeat purchases in the future (Mahsyar & Surapati, 2020).

Several empirical studies have been conducted on the factors influencing customer loyalty, including: Apriliana & Hidayat (2020) found that product quality, service quality, and customer satisfaction directly influence customer loyalty. Furthermore, research conducted by Oetarjo & Prastyo (2017) and Jati et al. (2022) showed that service quality influences customer loyalty. However, a different study was found by Trianah et al. (2017) that service quality and customer satisfaction did not influence customer loyalty. Furthermore, research by Haris & Welsa (2018) concluded that product quality had no effect on customer satisfaction and loyalty, and the influence of product quality with satisfaction as an intervening variable was unable to have a positive effect on increasing customer loyalty.

Previous research has shown inconsistent results between researchers, so researchers are interested in re-examining the customer loyalty model, with service quality and product quality as variables that directly influence customer loyalty. Based on the phenomena that occurred and the findings of previous research on service quality and product quality, and customer loyalty, it appears that there is a research gap.

LITERATURE REVIEW

The Influence of Service Quality on Customer Loyalty

According to Insani & Madiawati (2020), service quality impacts customers, especially customer loyalty. If service quality is perceived as better, customers will be happy and loyal to a company's products and services. Lovelock and Waright (2007) in Tiong (2018) also stated that service quality is

a customer's long-term cognitive evaluation of a company's service delivery. In general, good service provided by a company will result in high satisfaction and repeat purchases or very high loyalty. Previous research conducted by Agusti & Verano (2022) ; Rostiani et al. (2022) found that service quality has been proven to influence customer loyalty. If the quality of service provided by a company is in line with expectations and performance, consumers will be happy because the expectations and performance of the service are good, and consumer loyalty will directly arise to the company.

Based on this, the following hypothesis is formulated:

H1: Service quality has a direct influence on customer loyalty.

The Influence of Product Quality on Customer Loyalty

Product quality is a product's ability to perform its function, including overall durability, reliability, accuracy, longevity, and other product attributes. This indirectly indicates that a good product is one that also has good quality, thus creating satisfaction for the product's users. Customer satisfaction is highly dependent on the level of product quality offered. If the quality of a product can meet consumer desires, satisfaction will be more easily achieved (Cardia et al., 2019). Product quality is related to customer knowledge of a product brand, which has a positive effect on customer loyalty. Previous research conducted by Rahmawati and Rahmawati & Sentana (2021) ; Rua et al. (2020) found that product quality has a positive influence on customer loyalty.

Based on this, the following hypothesis is formulated:

H2: Product quality has a direct influence on customer loyalty.

RESEARCH METHODS

Research data This using primary data as source data retrieval. Primary data was obtained from PT XYZ customers in general directly. Primary data is carried out with share questionnaire through Google Form, namely with provide a questionnaire link in form Google form for the supply chain management (procurement) division and distributed to 50 companies active oil and natural gas operating. Next respondents give response on statements given. To measure the research variables, researchers used a Likert scale, a form of scale that will indicate whether respondents agree or disagree with statements about an object. More Furthermore, the population in this study is 30-50 oil and gas companies in Indonesia. For the sample method, non-probability sampling with purposive sampling technique was used. The respondent criteria in this study were respondents who worked in the supply chain management and engineering divisions. Therefore, the sample size used in this study was 50 respondents. This study uses the Structural Equation Model - Partial Least Square (SEM-PLS) approach with a measurement model using the Smart PLS version 3 program to measure the intensity of each research variable and a structural model to analyze the data and research hypotheses.

RESULTS AND DISCUSSION

In this study, the researcher used a measurement method using the SEM-PLS data analysis tool, in which there are two stages of measurement that need to be carried out, namely the measurement model (measurement model / outer model) and the structural model (structural model / inner model) :

Outer Model

Based on PLS method, testing validity indicator reflection can done in 2 stages. The first stage that is testing convergent validity and stage furthermore is testing discriminant validity. The following This is analysis test results convergent validity.

Table: 1 Convergent Validity Analysis Test (n=50)

	Service Quality	Product Quality	Customer Loyalty
SQ1	0,810		
SQ2	0,821		
SQ3	0,708		
SQ4	0,772		
SQ5	0,892		

	Service Quality	Product Quality	Customer Loyalty
SQ6	0,852		
SQ7	0,896		
SQ8	0,841		
SQ9	0,895		
PQ1		0,873	
PQ2		0.904	
PQ3		0.839	
PQ4		0.910	
PQ5		0.905	
PQ6		0.875	
CS1			
CS2			
CS3			
CS4			
CS5			
CS6			
CS7			
CL1			0.888
CL2			0.947
CL3			0.933
CL4			0.875

Source: Processed data (2025)

The results of the convergence validity analysis test, which includes the values of outer loading and AVE. In the loading values of all reflective constructs, which are above > 0.70 , it can be said to be valid. Based on these test results can concluded by researchers that mark outer loading can fulfil criteria due to mark from test results exceed the minimum value is 0.70 . In the test analysis validity convergence there is also an AVE value which is one part from testing analysis The results of the AVE test can be seen in the table under This.

Table: 2 Average Variance Extracted (AVE)

	AVE value
Service Quality	0,695
Product Quality	0,783
Customer Loyalty	0,830

Sumber : Data diolah (2025)

Can seen that all over AVE value for each variables declared valid because worth > 0.50 . With thus based on convergent validity test results, can concluded that indicators used in the research This is valid.

Based on PLS method, reliability indicators in research This determined from mark composite reliability and Cronbach's alpha for every block indicators. The following is Cronbach alpha and composite reliability test results in the study.

Table: 3 Results of Cronbach Alpha and Composite Reliability Tests

	Cronbach's Alpha	rho A	Composite Reliability
Service Quality	0.944	0.948	0.953
Product Quality	0.944	0.947	0.956
Customer Loyalty	0.931	0.932	0.951

Source: Processed data (2025)

The Cronbach alpha and composite reliability tests show all indicator stated reliable Because

produce mark Cronbach alpha and composite reliability on value 0.7 so that can used in testing hypothesis.

Inner Model

In the measurement model this, it is necessary noticed is looking for VIF (Variance Inflation Factor) for test Collinearity Statistics or multicollinearity test. The following table serve results from testing Collinearity Statistics.

Table: 4 Collinearity Statistic

	VIF
SQ1	4,526
SQ2	3,163
SQ3	1,900
SQ4	2,994
SQ5	4,808
SQ6	3,921
SQ7	4,631
SQ8	4,753
SQ9	5,225
PQ1	3,402
PQ2	4,155
PQ3	2,557
PQ4	4,895
PQ5	5,289
PQ6	3,201
CS1	2,708
CS2	3,299
CS3	4,378
CS4	3,789
CS5	2,012
CS6	4,685
CS7	2,415
CL1	3,019
CL2	5,667
CL3	4,671
CL4	2,992

Source: Processed data (2025)

The collinearity test results shown in the table, it can be concluded that all VIF values are below < 5.00. Therefore, it can be concluded that there is no multicollinearity problem in the model testing. evaluation inner model done with see coefficient determination. The following table serve mark coefficient the resulting determination for study This.

Table: 5 R-Square

	R-Square	R-Square Adjusted
Customer Loyalty	0.933	0.928

Source: Processed data (2025)

R-square value on variables customer loyalty is amounting to 0.933 things This show that 93.3% of the variables customer loyalty can influenced by variables service quality, and product quality.

In the inner model analysis in PLS, there is also an F2 (F-square) analysis. F-square is useful for testing whether the measure used assesses the relative impact of exogenous variables on endogenous variables.

Table: 6 Model Fit

Customer Loyalty

Customer Loyalty	
Customer Loyalty	
Product Quality	0.433
Service Quality	0.158

Source: Processed data (2025)

F-square value of the product quality variable on customer loyalty is greater than 0.35, indicating a strong influence. Meanwhile, service quality on customer loyalty has an F-square value greater than 0.15, indicating a moderate or sufficient influence.

t-Test Results

The output of the Structural Model Test (T-Values) can be seen in table.

Table: 7 Inner Model Output Results

Hypothesis	Sig.	t-statistic
H1 Service Quality → Customer Loyalty	0,005	2,816
H2 Product Quality → Customer Loyalty	0,000	4,782

Source: Processed data (2025)

Discussion

Service quality is proven to have a significant direct influence on customer loyalty. Because the t-statistics value of 2,816 is greater than the t-table value = 1.968, and the P-Values value = 0.005 is smaller than $\alpha = 0.05$. The results of this study provide the meaning that service quality is a long-term cognitive evaluation of customers towards the delivery of a company's services. In order for the company to survive and be able to compete is to maintain and improve the quality of service and services owned by PT XYZ. The higher the quality of service provided by PT XYZ, the better the service quality will be, which will have a significant impact on increasing customer loyalty, meaning that increasing service quality immediately makes customers loyal. The results of this study are in line with Djumarno et al. (2019) ; Apriliana & Hidayat (2020) who found that service quality has been proven to influence customer loyalty.

Then, a significant direct effect of product quality on customer loyalty was obtained. This is because the t-statistics value of 4.782 is greater than the t-table value = 1.968, and the P-Values value = 0.001 is smaller than $\alpha = 0.05$. These results also explain that a product with good quality can increase consumer loyalty, because consumers feel they get what they expect, thus consumers are satisfied with the product. In essence, product quality can fulfill the needs, expectations, or desires of consumers, and with this, consumers will make repeat purchases of the product. The results of this study support previous findings by Rahmawati & Sentana (2021) who found that product quality has a positive influence on customer loyalty.

CONCLUSIONS

Based on the results of direct research that has been conducted at PT XYZ, it can be concluded that service quality And Product quality has been shown to influence customer loyalty. Regarding the service quality variable, PT XYZ management is advised to pay attention to the quality of service/services related to determining or planning production schedules to ensure they are made in accordance with customer orders/requests. Then, regarding with variables product quality, then recommended to party management of PT XYZ for can notice quality products produced with do control to quality product. Meanwhile for researchers next so that you can expand amount samples to be used, so that results study more representative. Then can also add variables other mediations such as customer trust and customer perceived value as well as develop study through addition other factors that can give influence to customer loyalty.

REFERENCES

Agusti, I., & Verano, Y. (2022). The Influence of Service Quality and Product Quality on Consumer

- Satisfaction (KFC Arjuna Medan Perjuangan). Niagawan, 11 (1), 37–42.
- Andreas, C. (2016). The Effect of Product Quality on Customer Loyalty with Satisfaction as an Intervening Variable. *Journal of Management Science and Research*, 5 (5).
- Apriliana, V., & Hidayat, W. (2020). The Effect of Product Quality and Service Quality on Consumer Loyalty with Consumer Satisfaction as an Intervening Variable (A Study on Consumers of Waroeng Spesial Sambal, Banyumanik Branch). *Journal of Business Administration*, 9 (4), 571–581. <https://ejournal3.undip.ac.id/index.php/jiab/article/view/28829>
- Cardia, D., Santika, I., & Respati, N. (2019). The Effect of Product Quality, Price, and Promotion on Customer Loyalty. *E-Journal of Management*, 8 (11), 6762–6781.
- Familiar, K., & Maftukhah, I. (2015). The Influence of Product Quality and Service Quality on Customer Loyalty through Customer Satisfaction. *Management Analysis Journal*, 4 (4).
- Haris, D., & Welsa, H. (2018). Product Quality and Design in Increasing Consumer Satisfaction and Loyalty (Case Study of Yogyakarta Dagadu Clothes). *Upajiw Dewantara*, 2 (2), 125–139.
- Insani, N., & Madiawati, P.. (2020). The Influence of Service Quality, Price, and Promotion on GoFood Customer Loyalty in Bandung City. *Journal of Economic Management & Accounting*, 4 (3), 112–122.
- Jati, P., Chasanah, U., & Hidayat, A. (2022). The Effect of Service Quality and Product Quality on Consumer Loyalty and Satisfaction at Pulesari Agrotourism, Sleman, DIY. *Business Studies*, Widya Wiwaha College of Economics, 30 (1), 1–22.
- Kotler, P., & Keller, K.. (2012). *Marketing Management (Global Edi)*. London: Pearson Education Limited.
- Makanyeza, C., & Mumiriki, D. (2016). Are all customers really the same? Comparing service quality and satisfaction between residential and business telecommunications customers. *Acta Commercii*, 16 (1), 1–10.
- Montung, P. (2015). The Influence of Product Quality, Service Quality, and Price Perception on Customer Satisfaction at Kawan Baru Restaurant. *Scientific Periodical Journal of Efficiency*, 15 (5).
- Oetarjo, M., & Prastyo, H.. (2017). The Influence of Product Quality and Service Quality on Customer Loyalty at PT. Roman Ceramic International in Mojokerto. *Journal of Business, Management & Banking*, 3 (1), 1–84.
- Pramudita, D., Gunawan, N., Ningsih, M., & Adilah, R. (2022). Determination of Customer Satisfaction and Customer Loyalty: Price and Product Quality (Marketing Management Literature Review). *Journal of Educational Management and Social Sciences*, 3 (1), 424–436.
- Priansa, D.. (2017). *Consumer Behavior in Contemporary Business Competition*. Alfabeta.
- Rostiani, A., Lestari, R., & Nurwulandari, A. (2022). The Influence of Product Quality, Service Quality, and Digital Marketing on Customer Loyalty Through Customer Satisfaction at Kemang Group Apartments, PT Pudjadi Prestige Tbk Jakarta. *Scientific Journal of Accounting and Finance*, 5 (2), 1086–1100.
- Shary, S., & Firdaus, MR (2016). The Influence of Price, Product Quality, and Service Quality on Customer Satisfaction in Forming Customer Loyalty (Study of Cafe Visitors in Banjarbaru). *JWM (Journal of Management Insights)*, 4 (1), 39–52.
- Sugiyono. (2017). *Quantitative Qualitative Research Methods and R&D (24th Edition)*. Bandung: Alfabeta.
- Tiong, P. (2018). The Influence of Service Quality on Customer Loyalty at PT. Primagum Sejati in Makassar. *Journal of Management Business*, 1 (2), 176–204.
- Tjiptono, F., & Diana, A. (2019). *Customer Satisfaction - Concept, Measurement, and Strategy*. Andi.
- Triannah, L., Pranitasari, D., & Marichs, SZ (2017). The Influence of Product Quality and Service Quality on Customer Satisfaction and Customer Loyalty (Case Study on D'besto Mangun Jaya 2 Tambun Selatan Customers). *STEI Journal of Economics*, 26 (1), 105–122.