



Proceeding – ICOBIS

INTERNATIONAL CONFERENCE ON GLOBAL INNOVATION AND TRENDS IN ECONOMICS
(ICOBIS)

Effects of Product Quality, Price Perception, and Service Quality on Customer Loyalty Through Customer Satisfaction at PT Asaputex Jaya, Tegal

1st Riska Maulidini

*Management Study Program, Faculty of Economics and Business
Universitas Pancasakti Tegal*

Tegal, Indonesia

riskamaulidini123@gmail.com

2nd Makmur Sujarwo

*Management Study Program, Faculty of Economics and Business
Universitas Pancasakti Tegal*

Tegal, Indonesia

makmursujarwo@gmail.com

3rd Yuniarti Herwinarni

*Management Study Program, Faculty of Economics and Business
Universitas Pancasakti Tegal*

Tegal, Indonesia

yuniartiherwinari@gmail.com

Abstract

This study aims to analyze the effects of product quality, price perception, and service quality on customer loyalty, both directly and indirectly through customer satisfaction as a mediating variable, at PT Asaputex Jaya (Sarung Pohon Korma), Tegal City. A quantitative approach was used. The population consists of consumers of Sarung Pohon Korma products, and 100 respondents were selected using probability sampling and Cochran's formula with a 10% error tolerance. Data were collected through a structured Likert-scale questionnaire and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0. The results show that product quality, price perception, and service quality have positive and significant effects on both customer loyalty and customer satisfaction. Customer satisfaction also has a positive and significant effect on customer loyalty, and it significantly mediates the effects of the three independent variables on loyalty. Service quality is the most dominant direct determinant of customer loyalty (path coefficient = 0.336). The R-square values are 0.717 for customer satisfaction and 0.774 for customer loyalty. The findings indicate that maintaining product quality, price-value suitability, and service quality is important for strengthening customer satisfaction and sustainable loyalty.

Keywords : *Product Quality; Price Perception; Service Quality; Customer Satisfaction; Customer Loyalty*

I. INTRODUCTION

Increasingly intense business competition requires companies to be able to retain consumers while building long-term relationships. In marketing, customer loyalty is an important indicator because loyal consumers not only repurchase but also tend to stick with their choice, give recommendations, and have a stronger attachment to the product or company. Companies therefore cannot orient themselves only toward sales; they must also pay attention to the experience, value, and satisfaction consumers receive.

This competition also occurs in the textile industry, including the sarong industry. Consumers have many alternative products, so companies must maintain their advantage through product quality, appropriate prices, and service that meets expectations. PT Asaputex Jaya is a sarong manufacturer that has operated in Tegal City since 1986, with Sarung Pohon Korma as its main brand. The company has built a market in Tegal and its surroundings but still faces the challenge of maintaining customer loyalty amid changing needs and competition. This is reflected in the company's offline sales (Table I): sales rose by about 0.95% from 2023 to 2024 but fell by about 1.72% in 2025. These fluctuations and the decline are an important basis for examining the factors related to customer loyalty.

Product quality can shape consumer assessments: a product whose performance, durability, conformance, and features meet expectations provides a better consumption experience. Price perception is also important because consumers evaluate whether the price paid is commensurate with the quality and benefits received. Service quality concerns the company's ability to provide reliable, fast, and responsive service, give assurance, and attend to consumers' needs. Customer satisfaction is an important variable in these relationships: consumers who receive products and service that match their expectations form positive evaluations, which can encourage repeat purchases and loyal behavior. This study therefore places customer satisfaction as a mediating variable to explain how product quality, price perception, and service quality shape customer loyalty.

The study uses Service-Dominant Logic (SDL) as one of its theoretical foundations. Vargo and Lusch (2004) explain that service is the basis of exchange and that value is formed through use and interaction. In the context of PT Asaputex Jaya, value for consumers comes not only from the physical sarong but also from the service and experience that accompany the purchase. Accordingly, the study aims to determine the effects of product quality, price perception, and service quality on customer loyalty and to test the role of customer satisfaction as a mediating variable.

TABLE I. OFFLINE SALES OF PT ASAPUTEX JAYA, 2023–2025

Year	Sales (IDR)	Change from previous year
2023	68,328,205,273	–
2024	68,974,687,581	+0.95%
2025	67,787,894,485	–1.72%

Source: PT Asaputex Jaya; percentage changes calculated by the authors.

A. Literature Review and Hypotheses

Service-Dominant Logic. Service-Dominant Logic is a marketing paradigm that places service as the basis of exchange. Value is not created solely by the company and delivered to the consumer but is formed through use and interaction among various parties. This perspective is relevant for explaining that service quality can be an important part of consumer value creation and long-term relationship formation (Vargo & Lusch, 2004).

Consumer behavior theory. Consumer behavior theory explains the process by which individuals or groups select, buy, use, and evaluate products and services to meet their needs. Post-purchase evaluation can result in satisfaction or dissatisfaction, which then affects subsequent purchase decisions (Kotler & Keller, 2009).

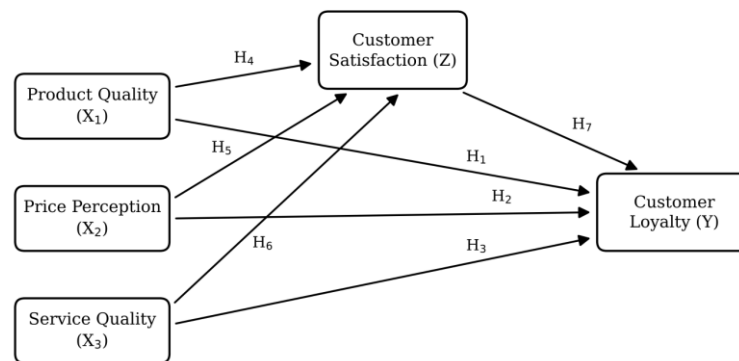
Product quality. Product quality is a product's ability to meet consumers' needs and expectations. In this study it concerns the ability of Sarung Pohon Korma to deliver good performance, durability, conformance, and features that consumers consider. Consistent quality increases consumers' confidence that the product delivers the expected benefits.

Price perception. Price perception is consumers' subjective assessment of the fairness and appropriateness of a price. Consumers do not look only at the nominal price but compare it with the quality and benefits received; a price considered affordable and commensurate with product quality can form a positive perception of value (Indrasari, 2019).

Service quality. Service quality is a company's ability to meet or exceed consumers' expectations. Parasuraman et al. (1988) developed the five SERVQUAL dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Good service creates positive experiences and increases the likelihood that consumers maintain their relationship with the company.

Customer satisfaction and loyalty. Customer satisfaction is a post-consumption evaluation formed by comparing perceived performance with expectations; when performance meets or exceeds expectations, consumers tend to feel satisfied, which can become the basis for positive attitudes and repurchase intention. Customer loyalty is a commitment to repurchase and to maintain one's choice of a product, reflected in repeat purchases, recommendations to others, and not switching easily to competitors (Griffin, 2005).

Conceptual framework and hypotheses. The model (Fig. 1) tests the direct effects of product quality (X_1), price perception (X_2), and service quality (X_3) on customer loyalty (Y) and customer satisfaction (Z), as well as the effect of satisfaction on loyalty, and then the indirect effects of X_1 , X_2 , and X_3 on Y through Z . The hypotheses are: H_1 – H_3 : product quality, price perception, and service quality each have a positive and significant effect on customer loyalty; H_4 – H_6 : product quality, price perception, and service quality each have a positive and significant effect on customer satisfaction; H_7 : customer satisfaction has a positive and significant effect on customer loyalty; and H_8 – H_{10} : customer satisfaction mediates the effects of product quality, price perception, and service quality, respectively, on customer loyalty.



H_8 – H_{10} : indirect effects of X_1 , X_2 , and X_3 on Y through Z (mediation)

Fig. 1. Conceptual Framework

II. METHOD

This study uses a quantitative approach. The research object is PT Asaputex Jaya (Sarung Pohon Korma), Tegal City. The population is all consumers of Sarung Pohon Korma products in Tegal City, whose exact number is unknown. The sample was determined using Cochran's formula with a 10% error tolerance, yielding 100 respondents, with a probability sampling technique.

Primary data were collected using a structured Likert-scale questionnaire. The variables are product quality (X_1), price perception (X_2), service quality (X_3), customer satisfaction (Z), and customer loyalty (Y). Data were analyzed using PLS-SEM with SmartPLS 4.0. The measurement (outer) model was evaluated through convergent validity (outer loadings and average variance extracted, AVE), discriminant validity (cross loadings, the Fornell-Larcker criterion, and the heterotrait-monotrait ratio, HTMT), and construct reliability (Cronbach's alpha and composite reliability). The structural (inner) model was evaluated through R-square and hypothesis testing; a hypothesis is supported when the t -statistic exceeds 1.96 and the p -value is below 0.05 (Abdillah & Jogyanto, 2015).

III. RESULTS AND DISCUSSION

A. Respondent Characteristics

The study involved 100 consumers of Sarung Pohon Korma, comprising 60 men (60%) and 40 women (40%). The respondent data also cover age, occupation, monthly income, and purchase frequency, which are used to give a general picture of the data sources.

B. Measurement Model Evaluation

Convergent validity. All retained indicators have outer loadings above 0.70, and the AVE of every construct exceeds 0.50 (Table II), so the constructs of product quality, price perception, service quality, customer satisfaction, and customer loyalty meet the convergent validity criterion. Only the retained indicators are reported: ten indicators each for product quality, price perception, and service quality, seven for customer satisfaction, and eight for customer loyalty.

TABLE II. MEASUREMENT MODEL: CONVERGENT VALIDITY AND RELIABILITY

Construct	Indicators retained	Outer loading range	AVE	Cronbach's α	Composite reliability
Product Quality (X1)	10	0.739–0.824	0.611	0.929	0.940
Price Perception (X2)	10	0.770–0.854	0.667	0.945	0.952
Service Quality (X3)	10	0.727–0.870	0.653	0.941	0.950
Customer Satisfaction (Z)	7	0.701–0.746	0.506	0.838	0.878
Customer Loyalty (Y)	8	0.720–0.764	0.506	0.860	0.891

Source: SmartPLS 4.0 output (processed by the authors, 2026).

Discriminant validity. In the cross-loading results, every indicator has its highest loading on the construct it measures, with loadings above 0.70, so the indicators distinguish one construct from another. Under the Fornell–Larcker criterion (Table III), the square root of each construct's AVE (diagonal) is larger than its correlations with the other constructs. The HTMT values (Table IV) are all below 0.90; the highest is between customer satisfaction and customer loyalty (0.861), followed by customer satisfaction and service quality (0.842) and customer loyalty and service quality (0.852). Discriminant validity is therefore satisfied.

TABLE III. FORNELL-LARCKER CRITERION

Construct	Z	X1	X2	X3	Y
Customer Satisfaction (Z)	0.711				
Product Quality (X1)	0.645	0.782			
Price Perception (X2)	0.563	0.689	0.817		
Service Quality (X3)	0.684	0.701	0.612	0.808	
Customer Loyalty (Y)	0.690	0.655	0.584	0.706	0.711

Source: SmartPLS 4.0 output (2026). Diagonal values are the square roots of AVE.

TABLE IV. HETEROTRAIT-MONOTRAIT RATIO (HTMT)

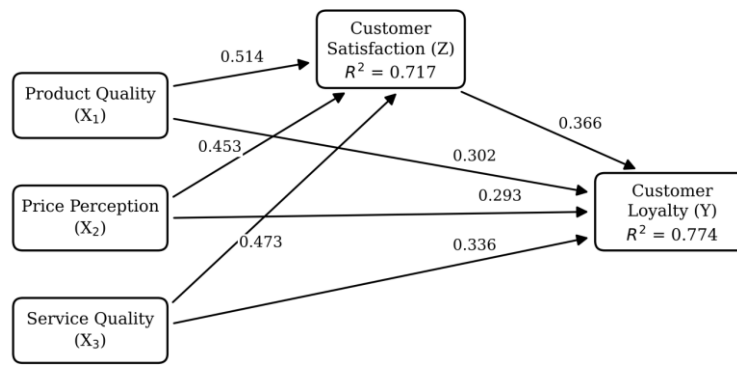
Construct	Z	X1	X2	X3	Y
Customer Satisfaction (Z)					
Product Quality (X1)	0.722				
Price Perception (X2)	0.626	0.789			
Service Quality (X3)	0.842	0.780	0.655		
Customer Loyalty (Y)	0.861	0.693	0.599	0.852	

Source: SmartPLS 4.0 output (2026). Criterion: HTMT < 0.90.

Reliability. All constructs have Cronbach's alpha and composite reliability above 0.70 (Table II), above the practical threshold of 0.70 (0.60 is still acceptable; Abdillah & Jogiyanto, 2015). The instrument therefore has good internal consistency and can be used for structural model testing.

C. Structural Model Evaluation

The R-square of customer satisfaction is 0.717, meaning that product quality, price perception, and service quality together explain 71.7% of its variation, while 28.3% is explained by other factors. The R-square of customer loyalty is 0.774, so 77.4% of its variation is explained by the variables in the model and 22.6% by other factors. The model thus has strong explanatory power for both endogenous variables (Fig. 2).



Path coefficients; all significant at $p < 0.05$

Fig. 2. Structural Model Results

TABLE V. HYPOTHESIS TESTING: DIRECT AND INDIRECT EFFECTS

Hyp.	Path	β	t-statistic	p-value	Decision
H1	Product Quality $\rightarrow$ Customer Loyalty	0.302	4.616	0.000	Supported
H2	Price Perception $\rightarrow$ Customer Loyalty	0.293	4.503	0.000	Supported
H3	Service Quality $\rightarrow$ Customer Loyalty	0.336	4.695	0.000	Supported
H4	Product Quality $\rightarrow$ Customer Satisfaction	0.514	8.560	0.000	Supported
H5	Price Perception $\rightarrow$ Customer Satisfaction	0.453	8.493	0.000	Supported
H6	Service Quality $\rightarrow$ Customer Satisfaction	0.473	10.185	0.000	Supported
H7	Customer Satisfaction $\rightarrow$ Customer Loyalty	0.366	3.711	0.000	Supported
H8	Product Quality $\rightarrow$ Satisfaction $\rightarrow$ Loyalty	0.188	3.645	0.000	Supported
H9	Price Perception $\rightarrow$ Satisfaction $\rightarrow$ Loyalty	0.166	3.478	0.001	Supported
H10	Service Quality $\rightarrow$ Satisfaction $\rightarrow$ Loyalty	0.173	3.477	0.001	Supported

Source: SmartPLS 4.0 bootstrapping output (2026). Criteria: $t > 1.96$ and $p < 0.05$.

D. Discussion

Direct effects on customer loyalty (H₁–H₃). Product quality ($\beta = 0.302$; $t = 4.616$), price perception ($\beta = 0.293$; $t = 4.503$), and service quality ($\beta = 0.336$; $t = 4.695$) each have a positive and significant effect on customer loyalty ($p = 0.000$). Better product quality, a more favorable perception of price, and better service are each associated with higher loyalty. Service quality has the largest path coefficient and is the most dominant direct determinant of loyalty, consistent with the SDL view that service and the interaction accompanying a purchase are central to value formation (Vargo & Lusch, 2004).

Effects on customer satisfaction (H₄–H₆). Product quality ($\beta = 0.514$; $t = 8.560$), price perception ($\beta = 0.453$; $t = 8.493$), and service quality ($\beta = 0.473$; $t = 10.185$) each have a positive and significant effect on customer satisfaction ($p = 0.000$). Product quality has the largest coefficient and is the most dominant factor for satisfaction. This is in line with consumer behavior theory, in which satisfaction arises when perceived performance meets or exceeds expectations (Kotler & Keller, 2009), and with the SERVQUAL perspective on service (Parasuraman et al., 1988).

Effect of satisfaction on loyalty (H₇). Customer satisfaction has a positive and significant effect on customer loyalty ($\beta = 0.366$; $t = 3.711$; $p = 0.000$): the higher the satisfaction, the higher the loyalty, expressed in repurchase, recommendation, and reluctance to switch to competitors (Griffin, 2005).

Mediating role of satisfaction (H_8-H_{10}). The indirect effects of product quality ($\beta = 0.188$; $t = 3.645$; $p = 0.000$), price perception ($\beta = 0.166$; $t = 3.478$; $p = 0.001$), and service quality ($\beta = 0.173$; $t = 3.477$; $p = 0.001$) on loyalty through satisfaction are all significant. Because the direct effects of the three variables on loyalty are also significant, customer satisfaction acts as a partial mediator. Product quality, price perception, and service quality therefore build loyalty both directly and by first raising satisfaction, which then encourages loyal behavior. For the company, this means that sustaining satisfaction is a necessary channel, but not the only one, for strengthening loyalty.

IV. CONCLUSIONS

Product quality, price perception, and service quality each have a positive and significant effect on both customer loyalty and customer satisfaction at PT Asaputex Jaya (Sarung Pohon Korma), Tegal City. Customer satisfaction has a positive and significant effect on customer loyalty and partially mediates the effects of the three independent variables on loyalty. Service quality is the most dominant direct determinant of loyalty ($\beta = 0.336$), and product quality is the most dominant determinant of satisfaction ($\beta = 0.514$).

The company is advised to maintain product quality and keep innovating in design, motifs, and product variety to follow changing consumer tastes, while ensuring consistent raw-material quality and production processes; to maintain a competitive price policy commensurate with product quality; and to improve service quality through employee training so that service is faster, friendlier, more responsive, and more professional. Future research may add variables that potentially affect loyalty, such as brand image, consumer trust, customer experience, customer value, promotion, or relationship marketing, and may extend the research object to other textile or other industries with a larger number of respondents to improve generalizability.

REFERENCES

- Abdillah, W., & Jogiyanto, H. M. (2015). *Partial least square (PLS): Alternatif structural equation modeling (SEM) dalam penelitian bisnis* [Partial least square (PLS): An alternative structural equation modeling (SEM) in business research]. Andi Offset.
- Griffin, J. (2005). *Customer loyalty: Menumbuhkan dan mempertahankan pelanggan* [Customer loyalty: Growing and retaining customers]. Erlangga.
- Indrasari, M. (2019). *Pemasaran dan kepuasan pelanggan* [Marketing and customer satisfaction]. Unitomo Press.
- Kotler, P., & Keller, K. L. (2009). *Marketing management* (13th ed.). Pearson Prentice Hall.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1–17. <https://doi.org/10.1509/jmkg.68.1.1.24036>