

Research Horizon

ISSN: 2808-0696 (p), 2807-9531 (e)

Research Horizon

Volume: 06

Issue: 01

Year: 2026

Page: 291-306

Citation:

Setiadi, Z. W., & Sari, N. (2026). The effects of price, brand image, and product quality on customer satisfaction and customer value. *Research Horizon*, 6(1), 291-306.

Article History:

Received: December 17, 2025

Revised: February 1, 2026

Accepted: February 27, 2026

Online since: February 28, 2026

The Effects of Price, Brand Image, and Product Quality on Customer Satisfaction and Customer Value

Zikri Wildan Setiadi^{1*}, Novita Sari¹

¹Institut Informatika dan Bisnis Darmajaya, Bandar Lampung, Indonesia

* Corresponding author: Zikri Wildan Setiadi (zikriwildan2@gmail.com)

Abstract

The highly competitive telecommunications industry poses customer retention challenges, due to price wars lowering average revenue per user, limited marketing of premium products, and network instability affecting digital experiences. This study examines the effects of price, brand image, and product quality on customer satisfaction and value within a single integrated model. A quantitative survey of customers was conducted, with data analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The data analysis results indicate that the price variable does not have a significant effect on either customer satisfaction or customer value. In contrast, the brand image variable shows a strong positive effect on both customer satisfaction and customer value. Product quality is found to be the most dominant predictor of customer value directly, although it does not have a significant effect on customer satisfaction. Customer satisfaction mediates the effect of price on value, whereas its mediation for brand image and product quality is not significant. These findings suggest that enhancing product quality, strengthening brand image, and optimizing pricing can effectively increase customer satisfaction and customer value. This study provides both theoretical and managerial insights for improving customer value in the telecommunications industry.

Keywords

Brand Image, Customer Satisfaction, Customer Value, Price, Product Quality.

1. Introduction

Indonesia's highly competitive telecommunications industry makes customer retention crucial, and PT Indosat Tbk or Indosat Ooredoo Hutchison (IOH) responds with digital innovations, from cloud-native network upgrades to premium products like IM3 Platinum with features such as data rollover. Despite accelerating digital transformation, the main challenge is customer experience, affecting satisfaction and value across price, brand image, and product quality (Noorsyah et al., 2024). Fierce price competition triggers churn, and although IOH's net profit rose, Average Revenue Per User (ARPU) remains below target due to low per-gigabyte prices, high retention and acquisition costs, and subsidies, with regional impacts such as in Lampung, where revenues fail to cover operational and infrastructure costs. Superior products like IM3 Platinum face marketing challenges from limited promotions, leading to low awareness and a hidden competitive advantage.

Although PT Indosat Ooredoo Hutchison (IOH) has upgraded its network to cloud-native infrastructure, the main challenges remain in basic services rather than premium offerings. Customers still report network instability, slow internet speeds, and fluctuating signal quality that disrupt streaming, video calls, and other digital activities, reducing perceived value and overall satisfaction. Customer satisfaction reflects an emotional evaluation of service performance compared with initial expectations; performance that meets or exceeds expectations increases satisfaction, whereas lower performance leads to dissatisfaction (Acar et al., 2024; Putri et al., 2024). Satisfaction further shapes brand perception, word-of-mouth, retention, and company profitability, making effective customer experience management essential (Setiobudi et al., 2021; Manyanga et al., 2022; Handoko & Kussudyarsana, 2024; Kurniawan et al., 2025; Tramvalidou & Vrana, 2025).

Consistency in meeting customer expectations is a strategic factor in creating satisfaction and positioning customers at the core of business strategy (Yum & Kim, 2024). Satisfaction mediates customer value, defined as the perception of benefits over sacrifices, and tends to increase when satisfaction is high, showing a mutually reinforcing relationship. However, empirical findings are mixed some studies by Nurfaizi and Marsasi (2025) report a significant positive association between satisfaction and value, while others indicate the effect is not dominant, and Gunawan et al. (2019) reveal that satisfaction does not necessarily significantly increase perceived value.

Price, often considered decisive, shows ambiguous effects on customer satisfaction. Some studies argue that competitive and transparent pricing positively shapes satisfaction, as customers evaluate fairness and affordability (Rufliansah & Seno, 2020; Lubis et al., 2024; Fujawati et al., 2024; Hasniel & Wicaksono, 2025; Ibrahim & Fachrian, 2025). However, other research reveals that high or low prices do not necessarily determine perceived value or satisfaction, and satisfaction is not solely dependent on price (Hadyarti & Kurniawan, 2022; Hakim, 2023; Thaib, 2025). Customers can remain satisfied with high prices if the service value exceeds expectations, as price reflects value only when the ratio between fees paid and received benefits, including service quality, is satisfactory (Ani et al., 2021; Nizam & Yustina, 2023; Salsabila & Kustiawan, 2025).

Brand image and product quality also play crucial roles in shaping customer perception and satisfaction. A strong brand image strengthens perceived value, builds trust, fosters expectations, and enhances satisfaction when expectations are met (Melewar et al., 2021; Volokhova, 2021; Açıkgöz et al., 2024). However, some studies report that brand image does not significantly affect satisfaction or value (Rahmawati & Solagracia, 2024). Similarly, product quality, especially when superior, reliable, and updated, can differentiate the company and build trust, but

unmet expectations may lead to negative value perception (Ole et al., 2025). Interestingly, research also shows that product or network quality does not always significantly influence satisfaction, indicating that high-quality products alone do not guarantee customer satisfaction (Dirsehan & Kadioğlu, 2023; Bagas & Vonny, 2024).

The inconsistency between conflicting research findings and the actual experiences of IOH customers in Bandar Lampung highlights a gap between theory and reality. The disparity between expectations created by companies through innovations and the realities perceived by customers indicates the need for a more in-depth and contextual study. A company's inability to consistently manage customer perceptions and expectations can hinder its competitiveness in the market (Kleinaltenkamp et al., 2022). Therefore, this study aims to empirically examine the relationships between price, brand image, and product quality as predictors of customer satisfaction and customer value in a single integrated model. By doing so, the study seeks to provide both theoretical and practical contributions, offering clearer insights into the dynamics of customer satisfaction among B2C customers in the Indonesian telecommunications industry.

2. Literature Review and Hypothesis Development

2.1. The Effect of Price on Customer Value and Satisfaction

Price is a representation of the value of a good or service expressed in currency and plays a strategic role in the marketing mix (Indrasari, 2019). As the only element that generates revenue, pricing is highly flexible and adaptable to market dynamics, which ultimately affects sales volume, cost efficiency, and competitiveness (Aguilar et al., 2024). Price is often used as a benchmark to assess product quality. High prices are usually associated with better quality, while low prices tend to be associated with regular standards (Prihartono, 2021; Sihombing et al., 2023). According to Customer Perceived Value (CPV) theory, price is a key component of "what is given" or monetary sacrifice by the customer (Zeithaml, 1988). Customers will feel high value if the benefits received are proportional to or greater than the price paid. Prices that are considered reasonable or in accordance with the accepted quality will significantly increase the perception of value.

Expectation-Disconfirmation Theory (EDT), price also plays a role in shaping initial expectations. Premium pricing can create superior performance expectations (Oliver, 1980). If the performance of the product or service successfully meets or exceeds the expectations set by the price, then the customer will feel satisfied. Many studies support that proper pricing, both in terms of nominal and tariff structure, is key to creating customer satisfaction (Aneta et al., 2024; Fadhillah & Nainggolan, 2024; Hasniel & Wicaksono, 2025). Price is an element that has a dual role, namely as a former of initial expectations and as a sacrificial component in value assessment. EDT premium pricing can set the expectation of superior quality; If the actual performance of the service meets or exceeds these expectations, then customer satisfaction is formed.

H1: Price has a positive and significant effect on customer value.

H2: Price has a positive and significant effect on customer satisfaction.

2.2. The Effect of Brand Image on Customer Value and Satisfaction

Brand image reflects the reputation and overall customer perception of a company or product, formed from experience, information, and visual elements in memory (Gupta et al., 2021; Saputra & Ariani, 2024; Nabila et al., 2025). It is shaped by the assessment of quality and excellence associated with the brand and tends to be durable and difficult to change (Ali et al., 2021). Physical elements such as name,

design, and products play a key role in public perception, making a positive brand image essential for customer retention and business continuity (Zhao et al., 2021; Wulandari et al., 2025). According to EDT, image directly influences initial customer expectations, with positive brands creating higher expectations (Oliver, 1980).

Brand image has a positive and significant effect on both customer value and customer satisfaction, indicating that consumers perceive higher value and feel more satisfied when they have favorable perceptions of the brand (Salsabila & Kustiawan, 2025). A strong reputation fosters trust and confidence in product and service quality, increasing satisfaction when expectations are met (Firdaus et al., 2021; Siami et al., 2022). From a Customer Perceived Value (CPV) perspective, brand image acts as an external quality signal, with strong brands associated with higher quality, enhancing the “what is accepted” component of customer value and providing psychological security that strengthens perceived value (Rusmahafi & Wulandari, 2020; Naini et al., 2022).

H3: Brand image has a positive and significant effect on customer value.

H4: Brand image has a positive and significant effect on customer satisfaction.

2.3. The Effect of Product Quality on Customer Value and Satisfaction

Products are a central element in marketing, representing the main offerings that companies provide to meet customer needs and achieve business goals (Singh & Singh, 2021). Network quality, as a key product, refers to the system’s ability to connect communication points efficiently, quickly, and stably, and is a major factor influencing purchasing decisions and overall customer experience (Prihartono, 2021; Tumangkeng et al., 2022; Symbor & Falas, 2025). Based on Expectation-Disconfirmation Theory (EDT), network quality factors such as download speed, signal coverage, and connection stability directly affect perceived performance. When performance meets or exceeds expectations, for example, smooth video calls or uninterrupted connections, positive disconfirmation occurs, increasing satisfaction.

Conversely, weak signals or technical issues generate negative disconfirmation and dissatisfaction. From a CPV perspective, network quality is a core component of “what is received” by customers, with reliable, safe, and relevant products reinforcing perceptions of value. Superior quality can differentiate a company and build trust, while poor quality diminishes overall service value (Meyer & Broutherset, 2023; Momou, 2024; Ole et al., 2025). Ultimately, superior network quality triggers satisfaction, which mediates its effect on customer value, as satisfied customers perceive greater functionality and benefits, reinforcing the “what is received” component of CPV.

H5: Product quality has a positive and significant effect on customer value.

H6: Product quality has a positive and significant effect on customer satisfaction.

2.4. Customer Satisfaction as a Mediating Variable

Customer satisfaction and perceived value are closely interrelated. Satisfaction arises from the comparison between expectations and actual experience and drives repurchase, while customer value reflects the subjective perception of total benefits relative to total sacrifices (Liang et al., 2024). Traditionally, value is seen as an antecedent to satisfaction, but positive experiences can also reshape value perception. According to EDT satisfying experiences lead customers to re-evaluate benefits, enhancing their judgment of overall value. Satisfaction serves as a cognitive mediator that validates customer investment, confirming that sacrifices are worthwhile. High satisfaction strengthens perceived functions and benefits,

increasing CPV and transforming quality signals, such as price, into substantial increases in customer value.

Research examining price perception and its effects on loyalty found that price perception indirectly influences customer loyalty through the mediating role of customer satisfaction, demonstrating that pricing's impact on value outcomes often operates via satisfaction rather than directly (Hardian, 2025). Cantona and Alvita (2024) found that customer satisfaction fully mediates the relationship between brand image and customer loyalty, indicating that brand image increases loyalty only indirectly through enhancing satisfaction. Studies on brand image show that brand image significantly affects customer satisfaction, which in turn enhances customer value or loyalty outcomes, underscoring satisfaction's mediating role between brand perception and value-related behavior (Achmad & Solekah, 2022). Likewise, evidence suggests that product quality has a positive effect on customer satisfaction, and customer satisfaction then contributes to increased customer value or loyalty, illustrating how satisfaction acts as a conduit through which quality influences perceived value and post-purchase behaviors (Wahjoedi et al., 2022).

- H7: Customer satisfaction has a positive and significant effect on customer value.
- H8: Customer satisfaction mediates the positive and significant effect of price on customer value.
- H9: Customer satisfaction mediates the positive and significant effect of brand image on customer value.
- H10: Customer satisfaction mediates the positive and significant effect of product quality on customer value.

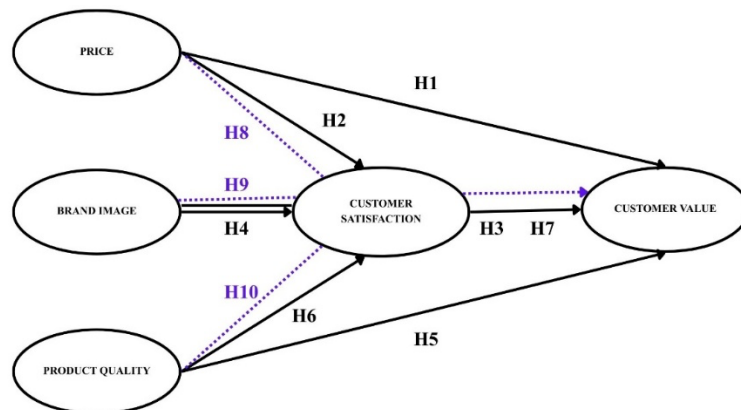


Figure 1. Conceptual Model

Figure 1 illustrates a conceptual model that explains the relationships between price, brand image, product quality, customer satisfaction, and customer value. Price, brand image, and product quality are proposed as significant antecedents that directly impact customer value and satisfaction. Additionally, customer satisfaction plays an important mediating role by shifting the effects of these antecedents toward consumer value. The dotted paths show the indirect effects of customer satisfaction, highlighting their importance in supporting the creation of customer value.

3. Methods

The research methodology uses a quantitative approach with surveys cross-sectional as the major research tool to investigate the stated hypothesis (Ali et al., 2022). The method was selected to examine the associative relationship between

variables, specifically how consumer value and satisfaction in telecommunication services are shaped by the combination of pricing, brand image, and product quality. Primary data was acquired through surveys that were sent offline to targeted respondents.

The research population consists of all PT Indosat Ooredoo Hutchison clients in the Bandar Lampung region, the precise number is unknown. Purposive sampling was utilized to choose respondents who fulfilled certain requirements, such as being at least 17 years old and an active customer of Indosat services for the previous three months. The targeted sample size ranged from 115 to 230 respondents. This amount is considered adequate for data analysis, according to the recommended calculations, which suggests a sample of 5 to 10 times the total number of research indicators (23 indicators). Scales that have been validated and adapted from previous studies are used in the questionnaire to ensure the robustness of the results. The statements and scales in the survey were adapted from the following sources: indicators for brand image evaluation, and prices and customer satisfaction are taken from Indrasari (2019), product quality of Sembiring and Purba (2024), and customer value from Wardhana (2024). A 5-point Likert scale is used to evaluate these statements, with two different types of labels to measure respondents' subjective perceptions and attitudes.

Using SmartPLS 4.0 software, modeling approaches such as Partial Least Squares Structural Equation Modeling (PLS-SEM) were used as the main method for analyzing quantitative data. The approach was selected because to its capacity to test intricate models and its efficiency in yielding trustworthy outcomes even with comparatively small sample sizes. The analysis is conducted in two main stages: first, the measurement model (outer model) is evaluated to verify the validity and reliability of the instrument, and second, the structural models (inner model) are evaluated to test the predictive power of the model and the significance of the relationship between variables.

4. Results

The study's structural model is depicted in Figure 2, which highlights the hypothetical link between the variables price, product quality, customer happiness, and purchase decision. The Partial Least Squares Structural Equation Modeling (PLS-SEM) method was used to analyze the data, including the assessment of measurement models (outer models) and structural models (inner models). The model uses path coefficients and outer loadings to show the construct's validity and quantify the degree and importance of the proposed variables' causal link.

The measurement model (outer model) and structural model (inner model) assessments were the two phases of the PLS-SEM model evaluation. Through exterior loadings, the measurement model verifies convergent validity and reliability. As illustrated in Figure 2, all indicators spanning price, brand image, network quality, customer satisfaction, and customer value exceed the recommended threshold of 0.70. Strong indicator validity and construct dependability are indicated by the outer loading values, which range from 0.769–0.887 for pricing, 0.890–0.920 for brand image, 0.763–0.863 for product quality, 0.906–0.929 for customer satisfaction, and 0.752–0.824 for customer value.

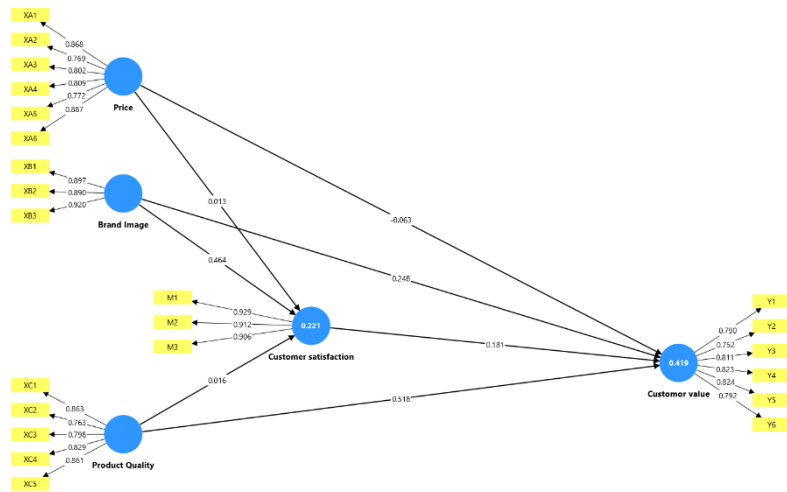


Figure 2. Results of Evaluation of External Models

The dependability and convergent validity findings for the constructs of customer value, customer satisfaction, product pricing, brand image, and product quality are shown in Table 1. The results demonstrate that all constructs attain sufficient internal consistency, with Cronbach’s Alpha values surpassing the suggested cutoff of 0.70. Customer satisfaction exhibits a marginally higher value of 0.901, while customer value records an alpha of 0.886. Composite reliability metrics (Rho_A and Rho_C) further validate construct dependability; all RHO_C values fall between 0.914 and 0.940, showing high reliability. Average variance extracted (AVE) values above the minimum criteria of 0.50, ranging from 0.638 to 0.838, further support convergent validity by demonstrating that each construct sufficiently explains the variance of its indicators.

Table 1. Construct Validity and Reliability

Variable	Cronbach’s Alpha	CR (Rho_A)	CR (Rho_C)	AVE
Customer Value	0.886	0.887	0.929	0.814
Customer Satisfaction	0.901	0.908	0.924	0.671
Product Pricing	0.904	0.907	0.940	0.838
Brand Image	0.881	0.885	0.913	0.678
Product Quality	0.887	0.889	0.914	0.638

All latent constructs, customer satisfaction, pricing, brand image, product quality, and customer value, show sufficient discriminant validity using the HTMT and Fornell–Larcker criteria, according to the discriminant validity assessment shown in Table 2. With the lowest correlation between brand image and product quality (0.113) and the highest between product quality and price (0.727), both within acceptable bounds, the HTMT values are all below the suggested threshold of 0.85, indicating a clear conceptual separation among the constructs.

In addition, customer value exhibits moderate correlations with customer satisfaction (0.456), price (0.378), brand image (0.379), and product quality (0.603), while brand image shows correlations of 0.522 with customer satisfaction and 0.126 with price, further supporting construct distinctiveness. Consistently, the Fornell–Larcker results show that the square roots of AVE for each construct, 0.902 for customer satisfaction, 0.819 for price, 0.916 for brand image, 0.824 for product quality, and 0.799 for customer value, exceed their respective inter-construct correlations. Taken together, these findings confirm that each construct captures a unique dimension of the model and satisfies discriminant validity requirements for subsequent structural analysis.

Table 2. Discriminant Analysis (HTMT) & Fornell-Lacker

Test	Variable	Customer Satisfaction	Pricing	Brand Image	Product Quality	Customer Value
HTMT	Pricing	0.218				
	Brand Image	0.522	0.126			
	Product Quality	0.186	0.727	0.113		
	Customer Value	0.456	0.378	0.379	0.603	
Fornell-Lacker	Customer Satisfaction	0.902				
	Pricing	0.191	0.819			
	Brand Image	0.469	0.113	0.916		
	Product Quality	0.162	0.648	0.100	0.824	
	Customer Value	0.405	0.341	0.342	0.536	0.799

The discriminant validity results according to the cross-loading criterion are shown in Table 3. According to this method, every indicator must show the maximum loading on the construct it is meant to assess in relation to every other build in the model. The results show that all indicators meet this requirement, indicating that each indicator accurately represents its respective latent variable without substantial overlap with other constructs. Indicators of customer satisfaction load highest on the customer satisfaction construct (with the highest loading of 0.929), price indicators load strongest on the price construct (maximum 0.887), brand image indicators on the brand image construct (up to 0.920), product quality indicators on the product quality construct (up to 0.863), and customer value indicators on the customer value construct (up to 0.824).

Table 3. Cross Loadings

Variable	Items	CS	P	BI	PQ	CV
Customer Satisfaction (CS)	CS 1	0.441	0.093	0.929	0.093	0.351
	CS 2	0.433	0.119	0.912	0.091	0.301
	CS 3	0.413	0.098	0.906	0.091	0.284
Price (P)	P1	0.133	0.868	0.102	0.571	0.302
	P2	0.195	0.769	0.101	0.478	0.216
	P 3	0.114	0.802	0.049	0.515	0.293
	P 4	0.163	0.809	0.094	0.508	0.279
	P5	0.188	0.772	0.119	0.514	0.253
	P6	0.160	0.887	0.093	0.590	0.319
Brand Image (BI)	BI1	0.897	0.146	0.400	0.150	0.388
	BI2	0.890	0.201	0.385	0.192	0.381
	BI3	0.920	0.172	0.482	0.101	0.330
Product Quality (PQ)	PQ 1	0.087	0.568	0.037	0.863	0.471
	PQ 2	0.124	0.548	0.031	0.763	0.414
	PQ 3	0.155	0.537	0.145	0.798	0.399
	PQ 4	0.153	0.523	0.129	0.829	0.484
	PQ 5	0.152	0.496	0.068	0.861	0.429
Customer Value (CV)	CV 1	0.270	0.217	0.244	0.421	0.790
	CV 2	0.323	0.243	0.311	0.363	0.752
	CV 3	0.245	0.349	0.173	0.539	0.811
	CV 4	0.419	0.245	0.385	0.417	0.823
	CV 5	0.283	0.357	0.250	0.453	0.824
	CV 6	0.394	0.221	0.271	0.370	0.792

Table 4. Multicollinearity Statistics

Variable	Items	VIF
Customer Satisfaction	CS 1	3.144
	CS 2	2.818
	CS 3	2.765
Price	P1	2.796
	P2	2.107
	P 3	2.297
	P 4	2.393
	P5	2.078
	P6	3.117
Brand Image	BI1	2.475
	BI2	2.386
	BI3	2.887
Product Quality	PQ 1	2.573
	PQ 2	1.969
	PQ 3	2.197
	PQ 4	2.093
	PQ 5	2.556
Customer Value	CV 1	2.035
	CV 2	1.758
	CV 3	2.145
	CV 4	2.138
	CV 5	2.394
	CV 6	1.999

Multicollinearity statistics based on the Variance Inflation Factor (VIF) indicate that the external model is free from serious collinearity issues, as summarized in Table 4. VIF values, which assess the extent to which indicator variance is inflated due to correlations with other indicators, remain within acceptable limits, with all values below the threshold of 5.0 and most below the stricter criterion of 3.3. The highest VIF is observed for customer satisfaction 1 (3.144), while the lowest is recorded for customer value 2 (1.758). Other indicators also fall within safe ranges, including price (2.078–3.117), brand image (2.386–2.887), product quality (1.969–2.573), and customer value (1.999–2.394). These results confirm that the indicators exhibit healthy correlations without multicollinearity concerns that could bias the structural model estimates.

Table 5. R Square and R Square Adjusted

Variable	R Square
Customer Satisfaction	0.221
Customer Value	0.419

Based on the results shown in Table 5, the model explains a moderate portion of the variance in the endogenous variables. Specifically, customer satisfaction has an R² of 0.221, indicating that approximately 22.1% of its variance is accounted for by the independent variables (price, brand image, and product quality). Meanwhile, customer value has an R² of 0.419, meaning that 41.9% of its variance is explained by price, brand image, product quality, and customer satisfaction. These values suggest that the independent variables have a stronger influence on customer value than on customer satisfaction. The adjusted R² values, which account for the number of predictors, support this interpretation and confirm the model’s predictive capacity. The findings emphasize the important roles of brand image and product quality in shaping customer value, with customer satisfaction acting as a partial mediator in the relationship.

Table 6. Path Coefficients

Path	Original Sample	t-statistics	p-values
Price -> Customer Value	-0.063	0.849	0.396
Price -> Customer Satisfaction	0.013	0.224	0.823
Brand Image - > Customer Value	0.248	4.456	0.000
Brand Image-> Customer Satisfaction	0.464	6.003	0.000
Product Quality -> Customer Value	0.518	7.085	0.000
Product Quality -> Customer Satisfaction	0.016	0.250	0.803
Customer Satisfaction -> Customer Value	0.181	3.206	0.001

Table 6 shows notable variations in the strength and significance of the relationships between variables. In particular, product quality has the strongest positive path coefficient to customer value (0.518, p = 0.000), highlighting its role as the most influential predictor of customer value. Brand image also significantly affects customer satisfaction (0.464, p = 0.000) and customer value (0.248, p = 0.000), indicating that a favorable brand image enhances both satisfaction and perceived value. Customer satisfaction itself has a significant positive effect on customer value (0.181, p = 0.001), suggesting its role as a partial mediator.

Conversely, the paths from price to customer satisfaction (0.013, p = 0.823) and to customer value (-0.063, p = 0.396), as well as from product quality to customer satisfaction (0.016, p = 0.803), are not significant. This indicates that, in this context, price and product quality do not substantially influence customer satisfaction, even though product quality remains critical in shaping customer value.

Table 7. Specific Indirect Effects

Path	Original Sample	Mean Sample	STDEV	t-statistics	p-values
Price -> Customer Satisfaction -> Customer Value	0.084	0.083	0.029	2.917	0.004
Brand Image -> Customer Satisfaction -> Customer Value	0.002	0.003	0.011	0.213	0.832
Product Quality -> Customer Satisfaction -> Customer Value	0.003	0.004	0.012	0.236	0.813

The results of the specific indirect effects analysis, as presented in Table 7, indicate that price has a significant indirect effect on customer value through customer satisfaction. This is evidenced by a t-statistic of 2.917, which exceeds the critical value of 1.96, and a p-value of 0.004, which is below the significance level of 0.05, with a positive original sample coefficient of 0.084. This finding suggests that customer satisfaction mediates the relationship between price and customer value, meaning that appropriate pricing can enhance customer satisfaction and subsequently increase perceived customer value. In contrast, the indirect effects of brand image and product quality on customer value through customer satisfaction are not significant. Brand image shows a t-statistic of 0.213 and a p-value of 0.832, while product quality shows a t-statistic of 0.236 and a p-value of 0.813, both of which do not meet the significance criteria. Therefore, customer satisfaction does not mediate the relationships between brand image and customer value, nor between product quality and customer value.

5. Discussion

The findings of this study indicate that price has no significant effect on either customer satisfaction or customer value. This result implies that competitive pricing does not generate a meaningful affective response in the form of satisfaction, nor does it contribute to customers' perception of value. Consequently, the indirect effect of price on customer value through customer satisfaction is significant, confirming that customer satisfaction mediates the relationship between price and customer value. This finding indicates that when customers perceive the price as appropriate or reasonable, it enhances their level of satisfaction, which subsequently increases the value they perceive from the product or service. Consistent with Mulia et al. (2024), price does not exert a direct influence on customer value, highlighting that financial sacrifice alone cannot shape value perceptions without complementary cognitive or affective cues.

In contrast, brand image has a significant and positive effect on both customer satisfaction and customer value. These findings suggest that brand image functions as both an affective driver of satisfaction and a cognitive signal of value. Moreover, the indirect effect of brand image on customer value through customer satisfaction is not significant, indicating that customer satisfaction does not mediate the relationship between brand image and customer value. This suggests that improvements in brand image do not necessarily lead to higher customer value through the mechanism of customer satisfaction within this model. This result aligns with Siregar et al. (2022), who argue that brand image can directly shape value judgments while also enhancing satisfaction. In the IOH context, brand image appears to operate as a dual mechanism, simultaneously influencing value perceptions and emotional responses.

Product quality, represented by network quality, shows a contrasting pattern. The results demonstrate that product quality has no significant effect on customer satisfaction, but it exerts the strongest and most significant direct influence on customer value. The findings of this study align with Purwati et al. (2020), showing that product quality does not significantly affect customer satisfaction but has a strong direct impact on customer value. In addition, the indirect effect of product quality on customer value through customer satisfaction is also insignificant. These findings confirm that network quality has shifted into a hygienic or must-be factor, consistent with the Kano model, where adequate performance is expected and no longer generates satisfaction. However, in line with Customer Perceived Value (CPV) theory, network quality remains the most dominant rational determinant of customer value, as customers assess value based on functional benefits such as connectivity stability and service reliability.

Furthermore, customer satisfaction itself has a strong and significant effect on customer value, confirming its role as an effective reinforcement mechanism in value assessment. This finding supports the view that satisfaction validates customer sacrifice and strengthens perceived benefits, thereby enhancing overall value perception. However, the mediating role of customer satisfaction is selective. Satisfaction only mediates the relationship between price and customer value, while failing to mediate the effects of brand image and product quality (Dam & Dam, 2021). This indicates that customer satisfaction in the IOH context is neither fully brand-driven nor product-driven, but rather conditionally activated by pricing strategies that successfully meet affective expectations.

The results reveal an asymmetric structure of value formation. Product quality and brand image primarily influence customer value through dominant direct paths, reflecting rational evaluation processes. Price, on the other hand, influences customer value only indirectly through customer satisfaction, highlighting the importance of affective confirmation. As explained by Wang et al. (2024) and Halim and Berlianto (2024), when strong direct functional attributes dominate, mediation

paths through satisfaction tend to weaken or become insignificant. These findings emphasize that IOH's strategic focus should prioritize network performance as the core value driver, while pricing strategies must be carefully managed to sustain satisfaction rather than merely compete on low cost.

6. Conclusion

The findings show that product quality is the strongest determinant of customer value, followed by brand image, both of which have significant positive effects on customer value. Brand image also significantly influences customer satisfaction, while customer satisfaction itself positively affects customer value. In contrast, price and product quality do not significantly influence customer satisfaction, and price does not directly affect customer value. However, mediation analysis reveals that customer satisfaction significantly mediates the relationship between price and customer value, while it does not mediate the relationships between brand image and customer value or product quality and customer value.

From a managerial perspective, the findings indicate that IOH's dependence on aggressive price competition is insufficient and may even undermine sustainable customer value. Instead, strategic focus should be directed toward strengthening brand image and maintaining reliable network performance. Brand image functions as an emotional buffer that helps preserve customer satisfaction during service disruptions, while product quality directly shapes customers' rational evaluations of value. Value creation efforts should prioritize brand communication, trust rebuilding, and service reliability rather than continued price reductions. Customer satisfaction plays a selective yet important role by translating positive brand perceptions into enhanced customer value.

Despite these contributions, the model explains only a modest portion of variance in customer satisfaction and customer value, indicating that other factors such as trust, service recovery, switching barriers, or emotional engagement may be important. The study's focus on a single region and operator also limits generalizability. Future research should include additional psychological and relational variables, adopt longitudinal designs, and conduct comparative studies across regions or providers to better understand customer value formation in telecommunications.

References

- Acar, A., Büyükdağ, N., Türten, B., Diker, E., & Çalhır, G. (2024). The role of brand identity, brand lifestyle congruence, and brand satisfaction on repurchase intention: A multi-group structural equation model. *Humanities and Social Sciences Communications*, 11(1), 1–13.
- Achmad, R., & Solekah, N. A. (2021). How the customer trust and customer satisfaction mediate brand image and service quality on customer loyalty in Islamic microfinance institutions. *Al Tijarah*, 7(2), 103–114.
- Açikgöz, F. Y., Kayakuş, M., Zăbavă, B. Ştefania, & Kabas, O. (2024). Brand reputation and trust: The impact on customer satisfaction and loyalty for the Hewlett-Packard brand. *Sustainability (Switzerland)*, 16(2), 56–77.
- Ali, B. J., Saleh, P. F., Akoi, S., Abdulrahman, A. A., Muhamed, A. S., Noori, H. N., & Anwar, G. (2021). Impact of service quality on the customer satisfaction: Case study at online meeting platforms. *International Journal of Engineering, Business and Management*, 5(2), 65–77.
- Ali, M. M., Hariyati, T., Pratiwi, M. Y., & Afifah, S. (2022). Metodologi penelitian kuantitatif dan penerapannya dalam penelitian. *Education Journal*.2022, 2(2), 1–6.
- Aneta, C. O., Wolok, T., & Isa, R. A. (2024). Pengaruh kualitas pelayanan dan penetapan harga terhadap kepuasan konsumen (Studi Kasus Pada RM. Wong Solo, Jl. Panjaitan Kota Gorontalo). *Jambura: Jurnal Ilmiah Manajemen dan Bisnis*, 7(1), 180–189.

- 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. *Jurnal EMBA*, 9(2), 663–674.
- Cantona, C. F., & Alvita, M. (2024). Pengaruh brand image dan brand trust terhadap loyalitas pelanggan pada shopee dengan kepuasan pelanggan sebagai variabel intervening. *Gemilang: Jurnal Manajemen dan Akuntansi*, 4(3), 73–86.
- Dam, S. M., & Dam, T. C. (2021). Relationships between service quality, brand image, customer satisfaction, and customer loyalty. *The Journal of Asian Finance, Economics and Business*, 8(3), 585–593.
- Dirsehan, T., & Kadioğlu, C. T. (2023). Operationalizing customer-perceived value as an emergent variable: Empirical evidence from mobile food ordering and delivery applications. *Journal of Creating Value*, 9(2), 227–244.
- Fadhilah, R. E., & Nainggolan, B. M. (2024). Peran kualitas pelayanan, kepercayaan dan pengalaman pelanggan terhadap kepuasan pelanggan. *Inovasi*, 11(1), 150–163.
- Firdaus, M., Krisnawati, N., & Basbeth, F. (2021). Analyzing technical competency, relational capabilities and cognitive abilities on customer satisfaction at distributor companies in Indonesia. *Emerging Markets: Business and Management Studies Journal*, 9(1), 35–46.
- Fujawati, E., Susnita, T. A., & Ratnasari, N. (2024). Strategi harga dan kualitas produk dalam meningkatkan kepuasan konsumen pada industri roti. *Journal of Innovation in Management, Accounting and Business*, 3(1), 11–21.
- Gunawan, T., Fathorrahman, F., & Handoko, Y. (2019). Efek mediasi kepuasan pelanggan atas pengaruh kualitas produk dan store atmosphere terhadap loyalitas pelanggan. *Jurnal Manajemen Dan Kewirausahaan*, 7(2), 189–204.
- Gupta, A., Garg, A., Farhan, F., Chandna, M., Jain, R., & Kumar, S. (2021). *Effect of brand image on consumer buying behaviour*. Retrieved on October, 25, 2025 from <https://ssrn.com/abstract=3907928>
- Hadyarti, V., & Kurniawan, M. Z. (2022). Pengaruh harga dan kualitas pelayanan terhadap kepuasan pelanggan. *Eco-Entrepreneur*, 8(2), 47–59.
- Hakim, L. N. (2023). The effect of price and service quality on Alfamart retail customer satisfaction. *Jurnal Kajian Ekonomi, Manajemen, & Akuntansi*, 4(2), 80–91.
- Halim, I., & Berlianto, M. P. (2024). The effect of service quality dimensions, perceived value, customer satisfaction, and brand love toward customer retention on first media subscribers. *Widya Cipta: Jurnal Sekretari dan Manajemen*, 8(2), 139–152.
- Handoko, R. A., & Kussudyarsana, K. (2024). The effect of social media marketing and service quality on customer satisfaction of “Rpm Body Fitness” with brand image as an intervening variable. *Proceedings Series on Social Sciences & Humanities*, 15(23), 161–171.
- Hardian, H. (2025). Customer satisfaction mediates service quality and price perception on customer loyalty. *International Journal of Science, Technology & Management*, 6(1), 105–110.
- Hasniel, M., & Wicaksono, P. A. (2025). Terhadap kepuasan pelanggan di platform tumbasin.id menggunakan metode regresi linear (Studi kasus customer PT. Tumbas Sinergi Indonesia). *Industrial Engineering Online Journal*, 14(2), 53–65.
- Ibrahim, A. M., & Fachrian, Z. (2025). Hubungan kualitas produk dengan keputusan pembelian melalui harga kompetitif: studi kasus pada badan jurnal X. *Jurnal Bisnis dan Ekonomi*, 3(1), 42–58.
- Indrasari, M. (2019). *Pemasaran dan kepuasan pelanggan: pemasaran dan kepuasan pelanggan*. Surabaya: Unitomo press.
- Kleinaltenkamp, M., Eggert, A., Kashyap, V., & Ulaga, W. (2022). Rethinking customer-perceived value in business markets from an organizational perspective. *Journal of Inter-Organizational Relationships*, 28(1–2), 1–18.
- Kurniawan, A., Hidayatun, U. S., Tasrim, Jayanti, A., Septyarini, E., & Sudibyoy, T. D. (2025). Enhancing customer loyalty: The role of service quality in customer satisfaction. *Journal of Lifestyle and SDG'S Review*, 5(2), 1–25.
- Liang, M., Yu, J., & Jin, C. (2024). Effects of perceived benefits, value, and relationships of brands in an online-to-offline context: Moderating effect of ESG activities. *Sustainability (Switzerland)*, 16(23), 101–110.
- Lubis, A. Z., Nahulae, L. L., Anggraini, N. M., & Adawiyah, R. (2024). Analisis faktor-faktor yang memengaruhi penetapan harga. *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah*, 9(1), 2004–2012.

- Manyanga, W., Makanyeza, C., & Muranda, Z. (2022). The effect of customer experience, customer satisfaction and word of mouth intention on customer loyalty: The moderating role of consumer demographics. *Cogent Business and Management*, 9(1), 685–702.
- Melewar, T. C., Dennis, C., & Foroudi, P. (2021). *Building corporate identity, image and reputation in the digital era*. London: Routledge.
- Meyer, K. E., Li, J., & Brouthers, K. D. (2023). International business in the digital age: Global strategies in a world of national institutions. *Journal of International Business Studies*, 54(4), 577–588.
- Momou, D. F. T. P. (2024). Pengaruh citra merek, kualitas produk dan harga terhadap keputusan pembelian ulang dengan kepuasan sebagai variable intervening pada AMDK lokal produk Mamuya. *Jurnal Ilmiah Keagamaan Dan Kemasyarakatan*, 18(6), 4389–4405.
- Mulia, A., Nst, U., Mamuaya, N. C., Sultan, T., Kusuma, Y. B., Dewi, G. C., & Nugroho, A. P. (2024). Unraveling the antecedents of customer loyalty in the restaurant industry: The impact of perceived price fairness, product quality, and service quality through the lens of customer satisfaction. *11(9)*, 237–251.
- Nabila, F. P., Tuhagana, A., & Apriani, Z. (2025). The effect of excellent service and product quality on consumer satisfaction at Mejablay Rengasdengklok. *International Journal of Economics and Management Research*, 4(2), 307–319.
- Naini, N. F., Sugeng Santoso, Andriani, T. S., Claudia, U. G., & Nurfadillah. (2022). The effect of product quality, service quality, customer satisfaction on customer loyalty. *Journal of Consumer Sciences*, 7(1), 34–50.
- Nizam U, A. & Yustina C. (2023). Pengaruh persepsi harga dan kualitas pelayanan terhadap kepuasan pelanggan. *GEMILANG: Jurnal Manajemen dan Akuntansi*, 4(1), 224–236.
- Noorsyah, M. N., Widyaningsih, A., & Andriana, D. (2024). Pricing strategy and service quality improvement to optimize customer satisfaction: A systematic literature review. *International Journal of Business, Law, and Education*, 5(2), 2827–2837.
- Nurfaizi, M. I., & Marsasi, E. G. (2025). How service quality and perceived privacy can affect the customer satisfaction in generations Y and Z?. *Media Ekonomi dan Manajemen*, 40(1), 165–191.
- Ole, H. C., Sakka, E. W., & Mandagi, D. W. (2025). Perceived quality, brand trust, image, and loyalty as key drivers of fast food brand equity. *Indonesian Journal of Islamic Economics and Finance*, 5(1), 99–124.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of marketing research*, 17(4), 460–469.
- Prihartono, P. (2021). Determination of purchase decision: Product quality, price and place (Literature review). *Dinasti International Journal of Economics, Finance & Accounting*, 2(3), 357–365.
- Purwati, A. A., Fitrio, T., Ben, F., & Hamzah, M. L. (2020). Product quality and after-sales service in improving customer satisfaction and loyalty. *J. Econ*, 16(2), 223–235.
- Putri, R. M., Mahmud, M., Anomsari, A., & Purwatiningsih, A. P. (2024). Pengaruh harga dan nilai yang dirasakan terhadap minat beli ulang dengan keputusan pembelian sebagai variabel intervening pada konsumen Indomaret di Semarang. *Jurnal Maneksi (Management Ekonomi Dan Akuntansi)*, 13(3), 748–764.
- Rahmawati, C. H. T., & Solagracia, S. (2024). The influence of product quality and price on purchasing decisions: brand image as mediation. *Journal of Business & Applied Management*, 17(2), 99–112.
- Rufliansah, F. F., & Seno, A. H. D. (2020). Pengaruh harga dan kualitas produk terhadap kepuasan konsumen (Studi pada Konsumen Rainbow Creative Semarang). *Jurnal Ilmu Administrasi Bisnis*, 9(4), 389–401.
- Rusmahafi, F. A., & Wulandari, R. (2020). The effect of brand image, service quality, and customer value on customer satisfaction. *International Review of Management and Marketing*, 10(4), 68–77.
- Salsabila, A., & Kustiawan, U. (2025). Influence of brand image and service quality on customer satisfaction, and its impact on perceived value of services, corporate image, and corporate reputation. *Jurnal Akuntansi, Manajemen dan Ilmu Ekonomi (Jasmien)*, 5(4), 516–531.
- Saputra, B. T., & Ariani, D. W. (2024). The influence of brand image, satisfaction, and brand trust on brand loyalty fore coffee in Yogyakarta. *Research Horizon*, 4(3), 129–136.

- Sembiring, N. B., & Purba, T. (2024). Pengaruh kualitas jaringan, direct marketing dan kualitas produk terhadap keputusan pembelian modem orbit di Telkomsel Batam. *Jurnal Ekonomi dan Manajemen Indonesia*, 24(2), 55–67.
- Setiobudi, A., Sudyasjayanti, C., & Danarkusuma, A. A. (2021). Pengaruh pengalaman pelanggan, kualitas layanan dan kepercayaan pelanggan terhadap kesediaan untuk membayar. *JBMI (Jurnal Bisnis, Manajemen, Dan Informatika)*, 17(3), 238–252.
- Siami, S., Martin, A., Gorji, M., & Grimmer, M. (2022). How discretionary behaviors promote customer engagement: The role of psychosocial safety climate and psychological capital. *Journal of Management and Organization*, 28(2), 379–397.
- Sihombing, L. A., Suharno, S., Kuleh, K., & Hidayati, T. (2023). The effect of price and product quality on consumer purchasing decisions through brand image. *International Journal of Finance, Economics and Business*, 2(1), 44–60.
- Singh, V., & Singh, P. (2021). A comprehensive analysis on managing business goals and objectives. *Journal of Management and Service Science (JMSS)*, 1(1), 1–6.
- Siregar, A., Hasibuan, M. I., Harahap, J. M., & Elvisyahfri, S. P. (2022). Pengaruh rating dan online customer review terhadap keputusan pembelian produk pakaian pada marketplace Shopee (Studi kasus mahasiswa Universitas Al-Washliyah Labuhanbatu). *Jurnal Ekonomi dan Bisnis (EK&BI)*, 5(2), 335–341.
- Symbol, W., & Falas, Ł. (2025). Ensuring reliable network communication and data processing in internet of things systems with prediction-based resource allocation. *Sensors*, 25(1), 247–259.
- Thaib, I. (2024). The influence of product quality, online shopping experience and price fairness on consumer loyalty at skintific skincare in Padang City with customer satisfaction as a mediating variable. *International Journal of Economics and Management Research*, 3(3), 297–309.
- Tramvalidou, K. M., & Vrana, V. G. (2025). Customer experience in public organizations: A multidimensional analysis. *Proceedings of the 1st International Conference on Public Administration 2024*. Basel: MDPI.
- Tran, Q. P., Do, A. D., Ha, D. L., Bui, P. T., Nguyen, D. K., & Tran, N. H. D. (2025). Value co-creation and customer satisfaction mediation on the service innovation and generation Z consumers' repurchase intention in Vietnam. *Cogent Business & Management*, 12(1), 246–251.
- Tumangkeng, B., Lapian, S. L. H. V. J., & Samadi, R. L. (2022). The influence of product quality, network quality and trust on customer satisfaction Indihome network users at Pt. Telkom Langowan (Case study in Manembo Village). *Jurnal EMBA*, 10(4), 1708–1717.
- Volokhova, G. (2021). Conceptualization of the corporate identity, image, and reputational studies. *European Journal of Economics and Management*, 7(1), 113–121.
- Wahjoedi, T., Harjanti, W., & Rahayu, S. (2022). Product quality and price perception on customer loyalty mediated by customer satisfaction. *World Journal of Advanced Research and Reviews*, 14(2), 14–22.
- Wang, J., Wu, J., Sun, S., & Wang, S. (2024). The relationship between attribute performance and customer satisfaction: An interpretable machine learning approach. *Data Science and Management*, 7(3), 164–180.
- Wardhana, A. (2024). *Customer value in the digital edge, Edisi Indonesia*. Purbalingga: Eureka Media Aksara.
- Wulandari, M., Helmi, S., Kartika, T., & Supardin, L. (2025). The relationship between brand association, brand awareness and brand image in improving perceived quality in the telecommunications company industry. *Pakistan Journal of Life & Social Sciences*, 23(1), 77–88.
- Yum, K., & Kim, J. (2024). The influence of perceived value, customer satisfaction, and trust on loyalty in entertainment platforms. *Applied Sciences (Switzerland)*, 14(13), 57–63.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2–22.
- Zhao, X., Guo, H., Cai, G., & Bandyopadhyay, S. (2021). The role of expectation–reality discrepancy in service contracts. *Production and Operations Management*, 30(11), 4160–4175.

Acknowledgment

We gratefully acknowledge the contributions of individuals who supported the completion of this article.

Funding Information

This research did not receive any funding.

Conflict of Interest Statement

The authors declare that there is no conflict of interest.

Ethical Approval and Originality Statement

Ethical approval was obtained for this study. The manuscript represents original work and has not been previously published, nor is it under consideration by another journal.

Data Disclosure Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.



Copyright: © 2026 by the authors.

This work is licensed under the terms and conditions of the Creative Commons Attribution-ShareAlike 4.0 International License (<https://creativecommons.org/licenses/by-sa/4.0/>).