

The Interplay of Corporate Image, Service Quality, Customer Value, and Satisfaction in Fostering Customer Loyalty: A Structural Equation Modeling Approach Using SmartPLS

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Abstract

In today's hyper-competitive business environment, customer loyalty has become a central focus for organizations aiming to maintain and expand their market share. This study examines the intricate relationships between corporate image, service quality, customer value, and customer satisfaction, and their collective impact on customer loyalty. By analyzing data from multiple scholarly articles and applying a structural equation modeling approach via SmartPLS, this research tests seven hypotheses that explore both direct and indirect effects of these variables on customer loyalty. Results reveal that corporate image, customer value, and satisfaction have significant direct influences on loyalty, while service quality exhibits no direct effect. Satisfaction serves as a mediating variable between corporate image, value, and loyalty, but not for service quality. These findings highlight the nuanced role of satisfaction as a bridge between the perceived value of a brand and customer loyalty. The study concludes with implications for business strategies and recommendations for future research, emphasizing the need to refine loyalty-building approaches by prioritizing customer satisfaction and brand perception.

Keywords: Customer loyalty, corporate image, service quality, customer value, customer satisfaction, structural equation modeling, SmartPLS, mediation analysis.

JEL Classification: M30, M31, M39

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I. Introduction:

Customer loyalty is a vital asset for businesses striving for long-term success. Companies that successfully foster loyalty among their customers are more likely to enjoy sustained revenue, reduced marketing costs, and enhanced competitive advantages (Å, 2008; Mcalexander et al., 2002; Puriwat & Tripopsakul, 2017). This study delves into the dynamics of customer loyalty by examining how corporate image, service quality, customer value, and satisfaction interact to shape loyalty. Previous research has emphasized the critical role of these factors in influencing customer behavior; however, the relationships between these variables remain complex and often context-dependent. This research aims to clarify these relationships through empirical testing, with particular attention to the mediating role of customer satisfaction.

Research Objectives:

1. To investigate the direct effects of corporate image, service quality, and customer value on customer loyalty.
2. To analyze the mediating role of customer satisfaction in the relationship between these independent variables and loyalty.
3. To identify practical insights for businesses seeking to enhance customer loyalty through strategic focus on satisfaction and perceived value.

II. Literature Review:

Literature Review

Customer loyalty is a critical factor for business sustainability, with various factors influencing its development. Previous studies have explored the relationships between **corporate image**, **service quality**, **customer value**, and **customer satisfaction**, highlighting the significance of each in shaping loyalty. This literature review delves into the key constructs related to customer loyalty and presents the rationale behind the formulated hypotheses for this study.

Satisfaction as a Mediator

Numerous studies have shown that **satisfaction** plays a crucial mediating role between **corporate image**, **service quality**, **customer value**, and **loyalty** (Khalil & Suharjito, 2019; Princes et al., 2020). Satisfaction acts as a key intermediary, enhancing the effects of these independent variables on loyalty. For instance, a favorable corporate image not only improves satisfaction but also leads to stronger customer loyalty. Similarly, customers who perceive high value from a product or service are more likely to report higher levels of satisfaction, which in turn fosters loyalty. This establishes satisfaction as a central element in the loyalty equation, justifying the inclusion of satisfaction as a mediator in this study's hypotheses.

Corporate Image and Customer Loyalty

Corporate image has been consistently linked to both **satisfaction** and **loyalty**. A positive corporate image helps build customer trust and loyalty by enhancing the perceived value and reliability of a brand (Anggoro Wilis & Nurwulandari, 2020; Diputra & Yasa, 2021; Winarno et al., 2020). Previous research suggests that customers who perceive a brand positively are more likely to exhibit repeat purchase behaviors and recommend the brand to others. This is further strengthened by satisfaction, which mediates the relationship between corporate image and loyalty, making the impact more pronounced. Hence, this study hypothesizes a positive and significant effect of corporate image on both satisfaction and loyalty.

- **H1:** Corporate image has a significant positive effect on customer loyalty.
- **H2:** Corporate image has a significant positive effect on customer satisfaction.

Service Quality and Customer Loyalty

The relationship between **service quality** and **customer loyalty** has been widely studied, though the findings are sometimes inconclusive. While high service quality is generally expected to improve customer satisfaction, which can lead to loyalty, some studies have found

that the direct effect of service quality on loyalty may not always be significant. This discrepancy highlights the potential for satisfaction to mediate the relationship between service quality and loyalty. If service quality meets or exceeds customer expectations, it enhances satisfaction, which in turn drives loyalty (Kurniawan, 2014; Rahma & Ekowati, 2022; Sitorus & Yustisia, 2018).

- **H3:** Service quality has a significant positive effect on customer loyalty.
- **H4:** Service quality has a significant positive effect on customer satisfaction.

Customer Value and Customer Loyalty

Customer value refers to the perceived benefit a customer receives in relation to the cost of the product or service. It is a strong predictor of both **satisfaction** and **loyalty**, as customers who perceive high value are more likely to remain loyal to a brand. Moreover, customer value often enhances satisfaction, which then strengthens the relationship between value and loyalty. Therefore, the literature supports a direct and significant relationship between customer value, satisfaction, and loyalty (Gallarza & Saura, 2006; Jayawardhena, 2010).

- **H5:** Customer satisfaction has a significant positive effect on customer loyalty.
- **H6:** Customer value has a significant positive effect on customer loyalty.
- **H7:** Customer value has a significant positive effect on customer satisfaction.

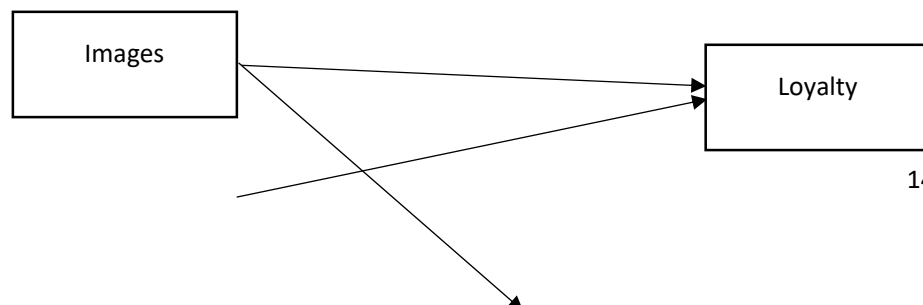
The review of the literature establishes strong evidence supporting the proposed relationships among corporate image, service quality, customer value, satisfaction, and loyalty. Satisfaction consistently emerges as a key mediator, reinforcing the effects of the independent variables on loyalty. These insights provide a solid foundation for the hypotheses tested in this study, highlighting the importance of satisfaction as an essential component in enhancing customer loyalty through corporate image, service quality, and customer value.

III. Research Methodology:

Data Collection:

This study uses data collected from surveys administered to a sample of customers from various industries. The survey instrument includes questions designed to measure corporate image, service quality, customer value, satisfaction, and loyalty, with each variable assessed using a Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The collected data were processed using SmartPLS, a structural equation modeling (SEM) tool that allows for the testing of complex relationships between variables.

Research Model and Hypotheses:



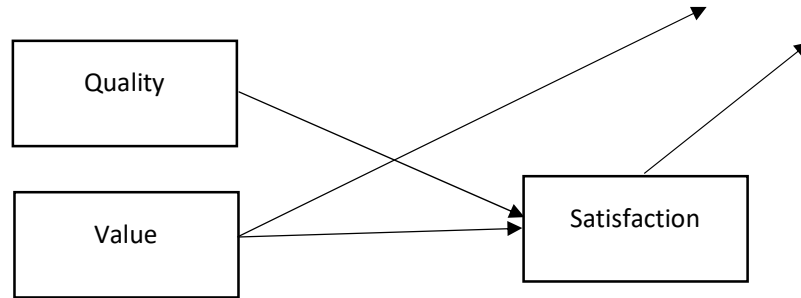


Figure 1 Research Model

Based on the literature, the following hypotheses were formulated:

1. **H1:** Corporate image has a positive and significant effect on customer loyalty.
2. **H2:** Corporate image has a positive and significant effect on customer satisfaction.
3. **H3:** Service quality has a positive and significant effect on customer loyalty.
4. **H4:** Service quality has a positive and significant effect on customer satisfaction.
5. **H5:** Customer satisfaction has a positive and significant effect on customer loyalty.
6. **H6:** Customer value has a positive and significant effect on customer loyalty.
7. **H7:** Customer value has a positive and significant effect on customer satisfaction.

The research model posits that customer satisfaction mediates the relationships between corporate image, service quality, customer value, and loyalty.

Data Analysis

The analysis involved evaluating the reliability and validity of the measurement model using Cronbach's Alpha and Average Variance Extracted (AVE). Path coefficients were then calculated using SmartPLS Bootstrapping to determine the significance of the relationships between the variables.

Previous research has consistently shown that **satisfaction** often serves as a mediating variable that links **image**, **quality**, and **value** to the dependent variable, **loyalty**. In this context, satisfaction acts as a bridge that influences the relationship between these independent variables and customer loyalty.

Scale Measurement: Scale measurement refers to how variables are defined and categorized within a study. Stanley Stevens introduced four types of measurement scales: **nominal**, **ordinal**, **interval**, and **ratio**. Each scale has specific characteristics that determine the appropriate method for analyzing the data. Scale measurement is often used when the variables cannot be directly measured or observed, known as latent variables, where the values can vary between respondents. For instance, a common scale used in surveys to measure customer satisfaction is the Likert scale, which ranges from 1 (Poor) to 5 (Excellent).

Data Collection: Data collection is the process of gathering relevant information from various sources to address a research problem. It also serves as a means to evaluate the outcomes of the research. There are multiple methods of data collection, including **observation**, **interviews**,

and **questionnaires**. The choice of method depends on the research objectives and the type of data required.

Data Sampling: Data sampling is a statistical technique used to select, manipulate, and analyze a representative subset of data points to identify patterns and trends within a larger data set. One common method is **probability sampling**, where samples are randomly selected to ensure they accurately represent the broader population.

IV. Results and Discussion

Measurement Model:

The results from the reliability and validity tests indicate that all variables—corporate image, service quality, customer value, satisfaction, and loyalty—meet the thresholds for reliability and validity. Cronbach's Alpha values exceeded 0.7 for all constructs, and AVE values surpassed 0.5, confirming the constructs' reliability and validity.

. Table 1 Validity and Reliability Test

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Value	0.836	0.843	0.890	0.670
Satisfaction	0.894	0.906	0.927	0.760
Quality	0.871	0.879	0.907	0.661
Loyalty_	0.819	0.863	0.880	0.649
Images	0.830	0.857	0.881	0.601

The analysis of the reliability and validity of the indicators used in the study demonstrates strong support for the robustness of the measurement model. The reliability of each indicator was assessed using Cronbach's Alpha, and all indicators exceeded the threshold of 0.7, indicating that they are reliable.

Specifically, the indicator for **Value** had a Cronbach's Alpha of **0.836**, which confirms its reliability. Additionally, the **Average Variance Extracted (AVE)** for Value was **0.670**, surpassing the minimum requirement of 0.5, thus validating the indicator. Consequently, the Value indicator is both reliable and valid.

Similarly, the indicator for **Satisfaction** exhibited a Cronbach's Alpha of **0.984**, demonstrating a high degree of reliability. The AVE for Satisfaction was **0.760**, further supporting its validity. Therefore, the Satisfaction indicator is also both reliable and valid.

For the **Quality** indicator, a Cronbach's Alpha of **0.871** was observed, confirming its reliability, while the AVE value of **0.661** indicated that it is valid. Thus, the Quality indicator is both reliable and valid.

The **Loyalty** indicator presented a Cronbach's Alpha of **0.819**, reflecting its reliability, and an AVE of **0.649**, confirming its validity. As a result, the Loyalty indicator is considered reliable and valid.

Lastly, the indicator for **Images** showed a Cronbach's Alpha of **0.830**, meeting the criteria for reliability. The AVE for Images was **0.601**, which confirms its validity. Consequently, the Images indicator is both reliable and valid.

In conclusion, all of the indicators—**Value, Satisfaction, Quality, Loyalty, and Images**—demonstrated high levels of both reliability and validity, confirming the robustness and suitability of the measurement model used in this research.

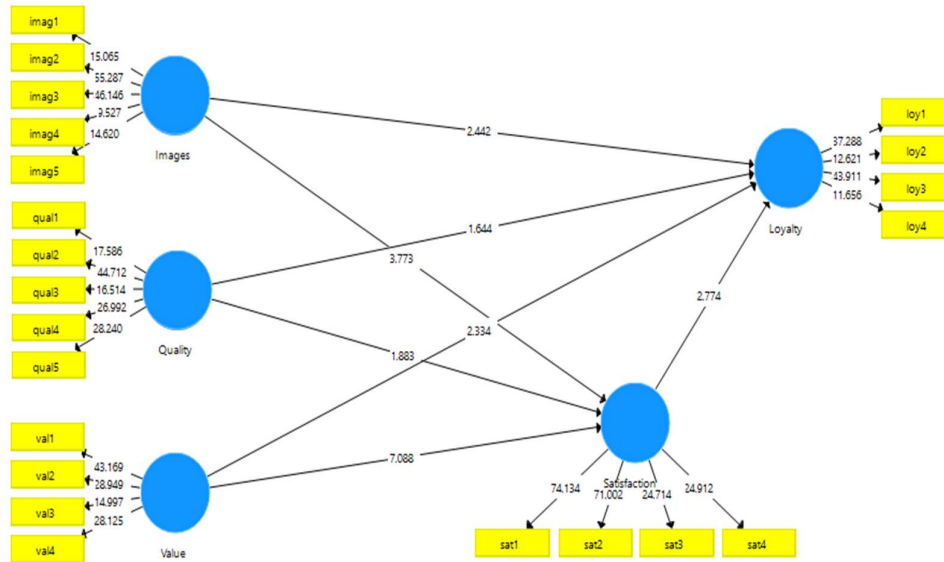


Figure 2 Research Model di SmartPLS

From the research findings illustrated in the model, customer satisfaction acts as a mediator between the independent variables—**Image, Quality, and Value**—and the dependent variable, **Loyalty**. Furthermore, these independent variables (Image, Quality, and Value) also have the potential to directly influence Loyalty without the mediation of satisfaction.

To test these hypotheses, a **T-test** was conducted to determine whether the independent variables have a significant effect on the dependent variables. The hypotheses were tested using the following framework:

- **Null Hypothesis (H0):** The independent variable does not significantly affect the dependent variable.
- **Alternative Hypothesis (H1):** The independent variable significantly affects the dependent variable.

The **level of significance** chosen for this study is **5% ($\alpha = 0.05$)**. The decision rule is based on comparing the **T-statistic (Thitung)** with the **critical T-value (Ttabel)** using the following criteria:

- If **Thitung < Ttabel**, then **H0 is accepted**, indicating that the independent variable does not have a significant effect on the dependent variable.

- If $T_{hitung} > T_{tabel}$, then **H0 is rejected**, indicating that the independent variable has a significant effect on the dependent variable.

The hypotheses were tested using **SmartPLS Bootstrapping** to generate the **path coefficients** and their corresponding significance levels. These path coefficients reveal the strength and significance of the relationships between the variables and help determine which hypotheses are supported by the data.

Table 2 Path Coefficients

	Original Sa...	Sample Me...	Standard D...	T Statistics (...)	P Values
Images -> Loyalty_	0.186	0.193	0.076	2.442	0.015
Images -> Satisfaction	0.184	0.187	0.049	3.773	0.000
Quality -> Loyalty_	0.150	0.152	0.091	1.644	0.101
Quality -> Satisfaction	0.152	0.155	0.081	1.883	0.060
Satisfaction -> Loyalty_	0.231	0.228	0.083	2.774	0.006
Value -> Loyalty_	0.252	0.247	0.108	2.334	0.020
Value -> Satisfaction	0.575	0.571	0.081	7.088	0.000

Hypothesis Testing:

Table 2 presents the path coefficients and their significance levels:

- **H1:** Corporate image has a significant positive effect on customer loyalty ($p = 0.015$).
- **H2:** Corporate image has a significant positive effect on customer satisfaction ($p = 0.000$).
- **H3:** Service quality does not have a significant effect on customer loyalty ($p = 0.101$).
- **H4:** Service quality does not have a significant effect on customer satisfaction ($p = 0.060$).
- **H5:** Customer satisfaction has a significant positive effect on customer loyalty ($p = 0.006$).
- **H6:** Customer value has a significant positive effect on customer loyalty ($p = 0.020$).
- **H7:** Customer value has a significant positive effect on customer satisfaction ($p = 0.000$).

These results confirm that corporate image, customer value, and satisfaction play pivotal roles in fostering loyalty. In contrast, service quality does not directly impact loyalty or satisfaction in this model. Satisfaction mediates the relationships between image, value, and loyalty, but not between service quality and loyalty.

Discussion:

The findings of this study align with previous research that highlights the importance of customer satisfaction in driving loyalty. Corporate image and customer value significantly influence both satisfaction and loyalty, suggesting that businesses should prioritize enhancing their brand perception and ensuring customers perceive high value. Interestingly, the lack of direct influence from service quality on loyalty suggests that other factors, such as emotional attachment or brand trust, may play a more significant role in driving loyalty in certain contexts.

These results offer practical insights for businesses aiming to strengthen customer loyalty by focusing on satisfaction as a key mediator.

From the analysis of the path coefficients, the relationships between the variables are determined by the significance levels and the strength of the independent variables' effects on the dependent variables. The results from the hypothesis testing are as follows:

1. **T1: The Effect of Image on Loyalty** – A significance value of 0.015 (< 0.05) indicates that the effect of corporate image on customer loyalty is significant. Therefore, the hypothesis that corporate image has a significant impact on loyalty is accepted. This means that a positive corporate image increases customer loyalty.
2. **T2: The Effect of Image on Satisfaction** – A significance value of 0.000 (< 0.05) indicates that the effect of corporate image on customer satisfaction is also significant. This shows that corporate image plays a crucial role in enhancing customer satisfaction.
3. **T3: The Effect of Quality on Loyalty** – A significance value of 0.101 (> 0.05) indicates that the effect of service quality on customer loyalty is not significant. Therefore, the hypothesis that service quality affects loyalty is rejected. This means that in this study, service quality does not have a direct impact on customer loyalty.
4. **T4: The Effect of Quality on Satisfaction** – A significance value of 0.060 (> 0.05) indicates that the effect of service quality on customer satisfaction is also not significant. This suggests that service quality does not significantly influence customer satisfaction.
5. **T5: The Effect of Satisfaction on Loyalty** – A significance value of 0.006 (< 0.05) indicates that customer satisfaction has a significant positive effect on customer loyalty. This means that the more satisfied customers are, the more likely they are to remain loyal to the brand.
6. **T6: The Effect of Value on Loyalty** – A significance value of 0.020 (< 0.05) indicates that customer value has a significant positive effect on customer loyalty. This means that the higher the perceived value by customers, the more loyal they become to the brand.
7. **T7: The Effect of Value on Satisfaction** – A significance value of 0.000 (< 0.05) indicates that customer value has a significant positive effect on customer satisfaction. This shows that perceived customer value is a crucial factor in enhancing customer satisfaction.

Out of the seven hypotheses tested, only two were found to be non-significant: the **effect of service quality on loyalty** and the **effect of service quality on satisfaction**. This indicates that, in this study, service quality does not directly influence customer loyalty or satisfaction. On the other hand, **corporate image**, **customer value**, and **customer satisfaction** are shown to be key drivers in fostering customer loyalty.

V. Conclusion

This study provides empirical evidence that corporate image, customer value, and satisfaction are critical determinants of customer loyalty. Satisfaction plays a mediating role, linking corporate image and customer value to loyalty. The direct effects of service quality on loyalty were not significant, indicating that its influence may be more nuanced or context-dependent.

Businesses seeking to foster loyalty should focus on enhancing customer satisfaction through strong brand image and value offerings.

Research Implications and Future Recommendations

The findings suggest that businesses should focus on building and maintaining a positive corporate image and delivering perceived value to ensure customer satisfaction and loyalty. Future research should explore additional variables such as emotional engagement, brand experience, and trust, which may offer further insights into loyalty-building strategies. Additionally, testing these models across different industries or geographical locations could provide a more comprehensive understanding of the factors influencing loyalty.

References

- Ã, G. B. (2008). *Customer satisfaction and loyalty in service : Two concepts , four constructs , several relationships.* 15, 156–162. <https://doi.org/10.1016/j.jretconser.2007.11.004>
- Anggoro Wilis, R., & Nurwulandari, A. (2020). *The Effect of E-Service Quality, E-Trust, Price and Brand Image Towards E-Satisfaction and Its Impact on E-Loyalty of Traveloka's Customer.* 4(3).
- Diputra, I. G. A. W., & Yasa, N. N. (2021). The Influence of Product Quality, Brand Image, Brand Trust on Customer Satisfaction and Loyalty. *American International Journal of Business Management (AIJBM)*, 4(1), 25–34.
- Gallarza, M. G., & Saura, I. G. (2006). Value dimensions, perceived value, satisfaction and loyalty: an investigation of university students' travel behaviour. *Tourism Management*, 27, 437–452.
- Jayawardhena, C. (2010). The impact of service encounter quality in service evaluation: Evidence from a business-to-business context. *Journal of Business and Industrial Marketing*, 25(5), 338–348. <https://doi.org/10.1108/08858621011058106>
- Khalil, I., & Suharjito. (2019). Analysis of Factors That Affect the Re-Use of Carsharing Mobile Application. *Proceedings of 2019 International Conference on Information Management and Technology, ICIMTech 2019, August*, 18–23. <https://doi.org/10.1109/ICIMTech.2019.8843791>
- Kurniawan, R. (2014). Analisis Pengaruh Service Quality dan Sistem Informasi Sekolah terhadap Customer Satisfaction yang Berdampak pada Customer Loyalty Studi Kasus Sekolah Xyz. *ComTech: Computer, Mathematics and Engineering Applications*, 5(2). <https://doi.org/10.21512/comtech.v5i2.2241>
- Mcalexander, J. H., Schouten, J. W., & Koenig, H. F. (2002). Marketplace Communities A Broader View of Brand Community. *Journal of Marketing*, 66(January), 38–54. <https://doi.org/http://dx.doi.org/10.1509/jmkg.66.1.38.18451>

- Princes, E., Manurung, A. H., So, I. G., & Abdinagoro, S. B. (2020). The Next Level of Purchase Intention. *Journal of Critical Reviews*, 7(16), 632–639. <https://doi.org/10.31838/jcr.07.16.74>
- Puriwat, W., & Tripopsakul, S. (2017). The Impact of E-Service Quality on Customer Satisfaction and Loyalty in Mobile Banking Usage: Case Study of Thailand. *Polish Journal of Management Studies*, 15(2), 183–193. <https://doi.org/10.17512/pjms.2017.15.2.17>
- Rahma, A. W., & Ekowati, S. (2022). Pengaruh Kualitas Pelayanan dan Kepercayaan terhadap Loyalitas Konsumen dalam Berbelanja pada E-commerce Shopee. *Jurnal Manajemen Modal Insani Dan Bisnis*, 3(1), 10–17.
- Sitorus, T., & Yustisia, M. (2018). The influence of Service Quality and Customer Trust toward Customer Loyalty: The role of customer satisfaction. *International Journal for Quality Research*, 12(3), 639–654. <https://doi.org/10.18421/IJQR12.03-06>
- Winarno, S. H., Nalendra, A. R. A., & Givan, B. (2020). The Effect of Service Quality, Corporate Image, and Price Perceived in Creating Customer Satisfaction and Loyalty on Education Business. *Esensi: Jurnal Bisnis Dan Manajemen*, 10(1). <https://doi.org/10.15408/ess.v10i1.14468>