Mediating Role of Customer Satisfaction on the Effect of Service Quality and Innovation Strategy Toward Loyalty at PT Bank Pembangunan Daerah Bali

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Sections Info	ABSTRACT
Article history: Submitted: November 23, 2025 Final Revised: December 11, 2025 Accepted: January 06, 2026 Published: January 31, 2026 *Keywords:* Service Quality Innovation Strategy Customer Satisfaction Customer Loyalty	*Objective:* This study aims to analyze the influence of service quality and strategic innovation on customer loyalty, with customer satisfaction as a mediating variable. *Method:* Employing a quantitative approach, this research utilized a survey design with 100 BPD Bali customers selected through purposive sampling. Data were collected via questionnaires and analyzed using Structural Equation Modeling (SEM) with SmartPLS. Variables were measured based on SERVQUAL indicators for service quality, Innovation Diffusion Theory for strategic innovation, and Expectation-Confirmation Theory for satisfaction and loyalty. *Results:* The findings reveal that service quality and strategic innovation significantly and positively affect customer satisfaction and loyalty. Satisfaction partially mediates the relationship between service quality, strategic innovation, and loyalty. Indicators of service quality, particularly empathy, and the adoption of new technology in strategic innovation exhibited the strongest contributions. *Novelty:* These results underscore the importance of enhancing empathy-based services and adopting digital technologies to strengthen customer satisfaction and loyalty. PT Bank Pembangunan Daerah Bali should prioritize service reliability and product innovation to meet customer expectations.

INTRODUCTION

PT. Bank Pembangunan Daerah Bali (BPD), as one of the local banks operating in Bali Province with tourism-based economic dynamics, faces a dual challenge, namely maintaining a local customer base while increasing competitiveness amid the penetration of national commercial banks and fintech. The *gap phenomenon* arises when customer loyalty, which should be stable, is actually shocked due to the penetration of digital-based competitors [1], [2].

In the midst of fierce competition, PT. The Bali Regional Development Bank (BPD) is faced with the reality that competitors come not only from national commercial banks, but also from fintech companies that offer fast services, low fees, and continuous innovation. This is reflected in data showing that in the last three years, the number of customers using PT. The Bali Regional Development Bank (BPD) has decreased by 15%, while the number of transactions through mobile services has also decreased by 20%. In 2022, the number of customers using PT. Bank Pembangunan Daerah Bali (BPD) reached 120,000 customers, but in 2023 the number dropped to 102,000 customers, and in 2024 the number will only reach 87,000 customers. As for the number of transactions through *mobile* services, in 2022 it reached 3 million transactions, but in 2023 the number dropped to 2.4 million transactions, and in 2024 the number will only reach 1.92 million

transactions. This data is a clear indication of the gap between increased loyalty expectations and declining loyalty reality, thus confirming the existence of a gap phenomenon in BPD Bali [3], [4], [5].

Although PT. Bank BPD Bali is known as a regional bank that has socio-cultural closeness to the community, various complaints related to service quality are still found. Based on the reviews and ratings of Google Review PT. Bank BPD Bali on the digital platform appears to show a rating of three (3). Some customers expressed dissatisfaction with the speed of service at tellers, the attitude of frontliners who are less consistent in providing information, and the limitations of digital services compared to national banks. If referring to the banking customer satisfaction survey issued by the OJK (2022), service speed, friendliness, and clarity of information are the three main aspects that determine the perception of service quality.

RESEARCH METHOD

Conceptually in the study, the relationship between the variables of this study, namely service quality, innovation, customer satisfaction and loyalty can be explained in the following figure:
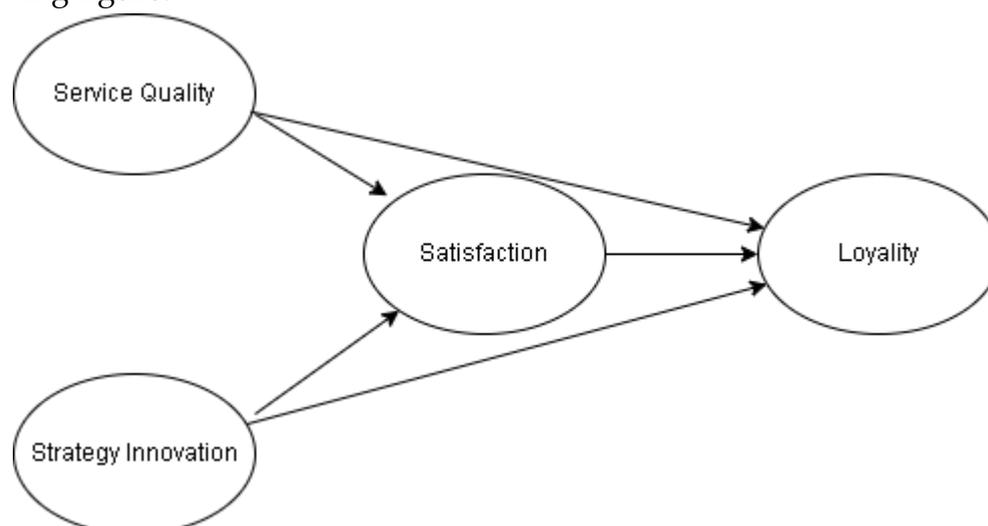
The hypothesis is a provisional answer from a study [6], [7], [8]. Based on these backgrounds, problems, and frame of mind, it can be hypothesized that:

H1: The quality of service has a positive and significant effect on the loyalty of PT. Bank BPD Bali.

H2: Strategic innovation has a positive and significant effect on the loyalty of PT. Bank BPD Bali.

H3: The quality of service has a positive and significant effect on customer satisfaction of PT. Bank BPD Bali.

H4: Strategic innovation has a positive and significant effect on customer satisfaction of PT. Bank BPD Bali.

H5: Satisfaction has a positive and significant effect on the loyalty of PT. Bank BPD Bali.

H6: Satisfaction mediates the influence of service quality on PT. Bank BPD Bali.

H7: Satisfaction mediates the influence of strategic innovation on PT. Bank BPD Bali.

Sampling uses *purposive sampling,* which is sampling based on consideration, According to Sugiyono (2019) a non-probability sampling technique that aims to select sample members from the population based on research objectives. With the minimum number of samples needed is 100 respondents.

This study uses a quantitative analysis approach that adopts *Partial Least Square* (PLS). PLS is an analysis method that *Powerful* because it is not based on many assumptions, Ghozali. When the model the structural to be analyzed meets the recursive model and latent variables have indicators that are formative, reflexive, or mixed, so the most appropriate approach to use is PLS [9], [10].

PLS analysis consists of two sub-models, namely structural models (*Structural Model*) or often called *Outer model*. Structural models or *Inner model* indicates the estimation strength between constructs, while the measurement model or *Outer model* indicates how the indicator represents the latent variable to be measured.

RESULTS AND DISCUSSION
Results

Based on the results of a study conducted on 100 customer respondents of PT. The Regional Development Bank (BPD) of Bali, obtained an overview of the characteristics of the respondents that show the dominant demographic profile of the bank's customers. Based on gender, the majority of respondents were women as much as 56%, while men were 44%. This finding indicates that female customers have a significant role in banking activities at BPD Bali. Fianto's research on the loyalty of Islamic bank customers in Indonesia found significant differences based on gender, where women are more dominant as customers of private Islamic banks, while men are more dominant in state-owned Islamic banks. In addition, many female customers work as housewives, showing that women are not only users of banking services, but also family financial decision-makers [11], [12].

Path *Coefficient (Direct effect)*

Variable	Path Coefficients	T statistics (|O/STDEV|)	P values	Remarks
Strategic Innovation - > Customer Satisfaction	0.639	10.031	0.000	Significant
Strategic Innovation - > Customer Loyalty	0.714	13.186	0.000	Significant
Customer Satisfaction - Customer Loyalty >	0.211	3.779	0.000	Significant
Quality of Service - > Customer Satisfaction	0.422	5.360	0.000	Significant

Variable	Path Coefficients	T statistics ($|O/STDEV|$)	P values	Remarks
Quality of Service -> Customer Loyalty	0.225	3.706	0.000	Significant

Source : Data processed, 2025

The table above provides information from the results of the analysis recapitulation above can determine the results of hypothesis testing as follows:

1) Hypothesis Testing (H_1)

The quality of service has a positive and significant effect on the loyalty of PT. Bank BPD Bali. This result is shown by the line coefficient with a positive value of 0.225 with T-statistic = 3.706 (T-statistic > 1.96) and p *value* = 0.000 (p *value* < 0.05) so that hypothesis 1 (H_1): The quality of service has a positive and significant effect on the loyalty of PT. Bank BPD Bali can be proven.

2) Hypothesis Testing (H2)

Strategic innovation has a positive and significant effect on the loyalty of PT. Bank BPD Bali. This result is shown by the path coefficient with a positive value of 0.714 with T-statistic = 13.186 (*T-statistic* > 1.96) and p *value* = 0.000 (p *value* < 0.05) so that hypothesis 2 (H_2) which states that strategy innovation has a positive and significant effect on customer loyalty of PT. Bank BPD Bali can be proven.

3) H3 Hypothesis Testing

The quality of service has a positive and significant effect on customer satisfaction of PT. Bank BPD Bali. This result is shown by the path coefficient with a positive value of 0.422 with T-statistic = 5.360 (T-statistic > 1.96) and p *value* = 0.000 (p *value* < 0.05) so that hypothesis 3 (H_3) which states that thequality of service has a positive and significant effect on customer satisfaction of PT. Bank BPD Bali can be proven.

4) H4 Hypothesis Testing

Strategic innovation has a positive and significant effect on customer satisfaction of PT. Bank BPD Bali. This result is shown by the path coefficient with a positive value of 0.639 with T-statistic = 10.031 (T-statistic > 1.96) and p *value* = 0.000 (p *value* < 0.05) so that hypothesis 4 (H4) which states that iinnovation strategy has a positive and significant effect on customer satisfaction of PT. Bank BPD Bali can be proven.

5) H5 Hypothesis Testing

Satisfaction has a positive and significant effect on the loyalty of PT. Bank BPD Bali. This result is shown by the path coefficient with a positive value of 0.211 with T-statistic = 3.779 (T-statistic > 1.96) and p *value* = 0.000 (p *value* < 0.05) so that hypothesis 5 (H5) which states satisfaction has a positive and significant effect on PT. Bank BPD Bali can be proven.
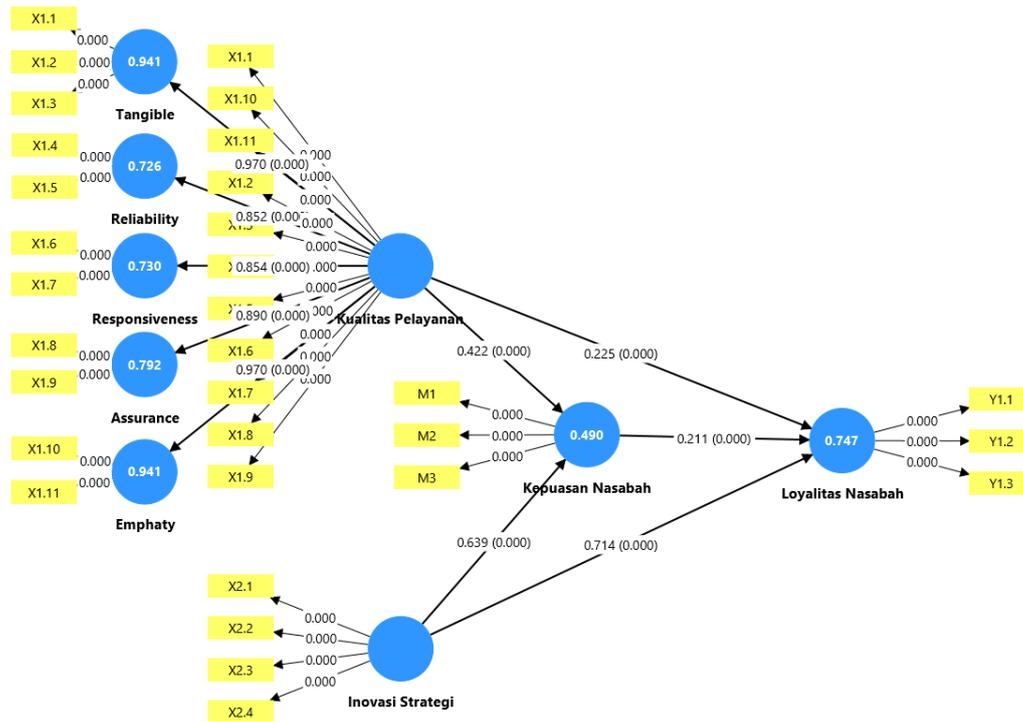
Full Model of PLS SEM Analysis Results

Discussion

The Effect of Service Quality on Customer Loyalty, The results of this study began with testing the validity and reliability of all variable constituent indicators through the *Outer Model* approach using *Smart Partial Least Square (Smart PLS).* Based on the results of the analysis, all indicators in the variables of service quality (X_1) and customer loyalty (Y) were declared valid because they had *an outer loading* value above 0.50 and were significant at the confidence level of 95% (p < 0.05). Thus, indicators such as *tangible, reliability, responsiveness, assurance, and empathy* that form the service quality construct are proven to be able to represent variables consistently. Similarly, *the repeat purchase, retention,* and *referrals* indicators on the loyalty variable showed *very high outer loading* values , ranging from 0.983 to 0.995, with *a t-statistic* value above 110 and *a p-value* of 0.000. These results confirm that all research instruments are not only valid but also reliable, making them suitable for use in testing causal relationships between variables in structural models.

The Effect of Strategic Innovation on Customer Loyalty, The results of *the Outer Model* test with *Smart Partial Least Square (Smart PLS)* show that the four indicators of strategy innovation, namely product or service novelty, application of new technology, services, and market segmentation have *an outer loading* value between 0.757 to 0.959, all of which are significant with *p-values* 0.000. Similarly, the *indicators of repeat purchase, retention,* and *referrals* in the loyalty variable show a very high *outer loading* value , namely 0.983 to 0.995, with *a t-statistic* above 110. These results confirm that all indicators have strong internal consistency in measuring their respective latent constructs. In other

words, both variables have been empirically verified as valid and reliable instruments to test the relationship between the influence of strategic innovation on customer loyalty.

The Effect of Service Quality on Customer Satisfaction, The test results showed that all indicators in the variables of service quality (X_1) and customer satisfaction (Y_1) met the validity criteria with *an outer loading* value above 0.50 and significant at a confidence level of 95% (p < 0.05). The *indicators of tangibles, reliability, responsiveness, assurance, and empathy* that form the service quality construct have been proven to be able to represent these variables consistently. Meanwhile, the customer satisfaction variables measured through the indicators of expectation, performance, confirmation of expectations, and overall satisfaction also showed a high reliability value with *a composite reliability* above 0.7. Thus, all question items were declared feasible and consistent in measuring respondents' perception of the quality of service and the level of satisfaction they felt.

The test results show that the indicators in the strategy innovation variables, which include product or service novelty, application of new technologies, services, *and* market segmentation, have *an outer loading* value ranging from 0.757 to 0.959. All of these indicators have proven to be valid with *a p-value* below 0.05 and have a significant contribution in measuring the latent variables of strategy innovation. On the other hand, the customer satisfaction variable, which is measured through the indicators of expectation, performance, confirmation of expectations, and overall satisfaction, also shows high reliability results, with *a composite reliability* value greater than 0.7. Thus, the instruments used in this study can be relied upon to measure the relationship between strategy innovation and customer satisfaction levels.

The test results show that the indicators in the customer satisfaction variable, which include economic benefits, ease of access, and reputation, have *an outer loading* value that ranges from 0.652 to 0.954. All of these indicators were declared valid with a significant *p-value* at a confidence level of 95% (p < 0.05). On the other hand, the customer loyalty variable, which is measured through *repeat purchase, retention,* and *referrals indicators*, shows a very high *outer loading* value , which is between 0.983 to 0.995, with *a p-value* of 0.000. This shows that all of these indicators have good reliability and consistency in measuring the construct in question.

The Role of Satisfaction in the Influence of Service Quality on Customer Loyalty, The results of an inferential test using *SmartPLS* provide strong evidence that customer satisfaction plays a significant mediating variable in the relationship between service quality and customer loyalty. The test showed that the quality of service had a positive and significant influence on customer satisfaction, with a significant *path coefficient* value at a confidence level of 95% (p < 0.05). Furthermore, customer satisfaction also has a significant positive influence on customer loyalty, which shows that the more satisfied customers are with the quality of service received, the more likely they are to remain loyal to PT. Bali Regional Development Bank (BPD Bali) [13], [14], [15].

The Role of Satisfaction in the Influence of Strategic Innovation on Customer Loyalty, The results of an inferential test using *SmartPLS* revealed that customer

satisfaction plays a significant mediating variable in the relationship between strategic innovation and customer loyalty. This test shows that strategy innovation, measured through the application of new technologies and service development, has a positive and significant influence on customer satisfaction. In other words, the greater the innovation implemented by PT. Bali Regional Development Bank (BPD Bali), the higher the level of satisfaction felt by customers. Furthermore, customer satisfaction also has a significant positive influence on customer loyalty, showing that customers who are satisfied with the innovations they receive tend to be more loyal to the bank's services.

CONCLUSION

Fundamental Finding : 1) Service quality provided by PT. Bank Pembangunan Daerah Bali (BPD Bali) has a positive and significant influence on customer loyalty, with reliability, responsiveness, and empathy being key drivers. 2) Strategic innovations, especially new technologies and service developments, positively affect customer loyalty by increasing customer satisfaction. 3) High service quality has a significant positive influence on customer satisfaction, with both direct service and digital channels contributing to a positive experience. 4) Strategic innovations, such as ease of access and improvements in digital features, increase customer satisfaction by meeting their needs. 5) Customer satisfaction has a significant influence on customer loyalty, confirming that satisfied customers are more likely to remain loyal. 6) Customer satisfaction acts as a significant partial mediator in the relationship between service quality and customer loyalty. **7)** Customer satisfaction also plays an important role as a partial mediator in the relationship between strategic innovation and customer loyalty. **Implication :** The findings highlight the importance of service quality and strategic innovation in improving customer satisfaction and loyalty. BPD Bali should focus on enhancing reliability, responsiveness, and empathy in their services, while also investing in digital technologies and service innovations to meet customer needs. Improving customer satisfaction is key to increasing loyalty, and banks should prioritize both service quality and strategic innovation to strengthen long-term customer relationships. **Limitation :** The study is limited by its focus on BPD Bali and does not explore the broader implications for other banks or financial institutions. Additionally, the research does not examine the long-term effects of service quality and strategic innovation on customer loyalty, nor does it consider the role of fintech or external market factors in customer behavior. Further research is needed to address these gaps. **Future Research :** Future research could explore the long-term impact of service quality and strategic innovation on customer loyalty, particularly in the context of evolving customer expectations. Investigating the role of fintech and digital banking innovations in customer loyalty would also provide valuable insights. Expanding the research to include a broader range of banks or financial institutions would allow for comparisons and further validation of these findings across different contexts.

REFERENCES

[1]   M. Rasidi and M. S. Arifin, "Pengaruh Kualitas Pelayanan Terhadap Loyalitas Nasabah Dengan Kepuasan Sebagai Variabel Intervening Pada Bmt Kampoeng Syariah," *KEADABAN: Jurnal Sosial dan Humaniora*, vol. 1, no. 2, 2020.

[2]   M. H. U. Rashid, M. Nurunnabi, M. Rahman, and M. A. K. Masud, "Exploring the relationship between customer loyalty and financial performance of banks: Customer open innovation perspective," *Journal of Open Innovation: Technology, Market, and Complexity*, vol. 6, no. 4, pp. 1–19, 2020, doi: 10.3390/joitmc6040108.

[3]   R. Ramadani and A. Azhar, "Correlation study between service quality and customer loyalty in hotels omacasa in bengkulu city," *Pedagogic Research-Applied Literacy Journal*, vol. 2, no. 1, pp. 169–175, 2025, doi: 10.70574/3fprta52.

[4]   C. Purnama, M. Rahmah, D. Fatmah, S. Hasani, Y. Rahmah, and Z. Z. Rahmah, "Customer Satisfaction as a Mediator between Service Quality and Customer Loyalty: Evidence from Islamic Banks in Indonesia," *Journal of Economic Cooperation and Development*, vol. 46, no. 3, pp. 175–206, 2025, [Online]. Available: https://www.scopus.com/inward/record.uri?eid=2-s2.0-105021514363&partnerID=40&md5=5adcec6831329c4fea6ee37421822b7e

[5]   S. D. Putra, "Pengaruh Kualitas Produk Dan Pelayanan Terhadap Loyalitas Kepuasan Nasabah Tabungan Prioritas Bank Negara Indonesia," Universitas Bina Darma, 2022.

[6]   D. M. J. Prasetya, "Peran kepuasan pelanggan dalam memediasi pengaruh inovasi layanan dan kualitas produk terhadap loyalitas pelanggan pada produk pertanian," in *Seminar Nasional Pariwisata Dan Kewirausahaan (SNPK)*, 2023, pp. 307–317. doi: 10.36441/snpk.vol2.2023.136.

[7]   D. Prasetya, "Peran kepuasan pelanggan dalam memediasi pengaruh inovasi layanan dan kualitas produk terhadap loyalitas pelanggan pada produk pertanian," in *Seminar Nasional Pariwisata Dan Kewirausahaan (Snpk)*, 2023, pp. 307–317. doi: 10.36441/snpk.vol2.2023.136.

[8]   T. D. Pramitasari and A. Y. A. Nanggala, "Dampak mobile banking terhadap kinerja dan stabilitas keuangan perbankan di Indonesia," *Jurnal Manajemen Dan Bisnis Indonesia*, vol. 9, no. 2, pp. 241–252, 2023, doi: 10.32528/jmbi.v9i2.855.

[9]   S. K. Panigrahi, N. B. Azizan, and I. R. Al Shamsi, "Product innovation, customer satisfaction, and brand loyalty of using smartphones among university students: PLS - SEM approach," *Indian Journal of Marketing*, vol. 51, no. 1, pp. 8–25, 2021, doi: 10.17010/ijom/2021/v51/i1/156931.

[10]   M. W. Nyadzayo, C. Leckie, and L. W. Johnson, "Customer participation, innovative aspects of services and outcomes," *Marketing Intelligence and Planning*, vol. 41, no. 1, pp. 1–15, 2023, doi: 10.1108/MIP-03-2022-0090.

[11]   C. Nwachukwu and H. M. Vu, "Service Innovation, Marketing Innovation and Customer Satisfaction: Moderating Role of Competitive Intensity," *Sage Open*, vol. 12, no. 2, pp. 1–19, 2022, doi: 10.1177/21582440221082146.

[12]   R. Nurcholis and R. Susanti, "Pengaruh Kepercayaan Merek dan Kualitas Pelayanan Terhadap Loyalitas Pelanggan Shopee dengan Kepuasan Pelanggan Sebagai Pemediasi," *PENG: Jurnal Ekonomi dan Manajemen*, vol. 2, no. 2, pp. 3014–3032, 2025.

[13]   Sugiyono, *Metodologi Penelitian Bisnis*. Bandung: Alfabeta, 2021.

[14]   R. Novendra, S. Umar, F. Syam, M. Yulfina, A. Afriansyah, and E. Yanti, "Analisis kualitas layanan mobile banking terhadap kepuasan nasabah bank," *Intecoms Journal of Information Technology and Computer Science*, vol. 5, no. 1, pp. 164–173, 2022.

[15]   I. Ghozali, *Aplikasi Analisis Multivariate dengan Program IBM dan SPSS 24*. Semarang: Bandan Penerbit Universitas Diponegoro, 2021.

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