

Banking Digitalization, Product Innovation, and Service Quality in Shaping Customer Loyalty: A Study at Bank Bjb's Kuningan Branch

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ABSTRACT

This study aims to analyze the effects of banking digitalization, product innovation, and service quality on customer loyalty at Bank BJB's Kuningan Branch. The study employs a quantitative approach with a descriptive and confirmatory design. Data were collected through a questionnaire distributed to 100 respondents using a five-point Likert scale. Data analysis included descriptive statistics, instrument validation, classical assumption tests, multiple linear regression, partial tests, simultaneous tests, and the coefficient of determination. The results show that banking digitalization has a positive and significant effect on customer loyalty ($B=0.206$; $t=2.783$; $p=0.006$). Product innovation has a positive but insignificant effect ($B=0.063$; $t=0.722$; $p=0.472$). Service quality has a positive and significant effect ($B = 0.411$; $t = 4.943$; $p < 0.001$) and is the most dominant variable with a standardized beta of 0.462. Simultaneously, all three variables have a significant effect on customer loyalty ($F = 24.587$; $p < 0.001$). The R^2 value of 0.434 indicates that the model explains 43.4% of the variation in customer loyalty. These findings suggest that efforts to increase customer loyalty should prioritize service quality, accompanied by the enhancement of digital services and product innovations relevant to customer needs.

INTRODUCTION

Competition in the banking industry has evolved in tandem with the increasing digitalization of financial services. Banks no longer compete solely through branch networks, the number of products, and capital strength, but also through their ability to provide a customer experience that is convenient, fast, secure, responsive, and consistent. The development of digital services has also given customers an increasing number of alternative financial service providers, making the ability to retain customer loyalty increasingly important.

Customer loyalty is demonstrated not only through repeated use of services but also through the desire to maintain the relationship, use additional products, provide recommendations, maintain

a positive perception, and resist switching to competitors. In the context of digital banking, the quality of the customer experience has become increasingly important because a significant portion of interactions takes place through apps and electronic channels.

Banking digitization is a key factor in shaping this experience. Ease of use, transaction speed, access to information, feature completeness, security, system availability, and service reliability can reduce transaction barriers and enhance the benefits customers perceive. Ayinaddis et al. (2023) demonstrate that the responsiveness, reliability, security, privacy, speed, and convenience of e-banking are linked to customer satisfaction and loyalty. Beanning and Zulkarnain (2024) also highlight the relationship between e-service quality and satisfaction and loyalty in mobile banking in Indonesia.

Product innovation is another strategic tool for creating value that aligns with customer needs. Innovation does not only mean creating new products but can also involve updates to features, procedures, access, benefits, and distribution systems. Nguyen et al. (2024) show that service innovation can enhance satisfaction and loyalty if it provides clear value to customers. Ratnasari et al. (2024) also demonstrate the relationship between product innovation and digital banking services and loyalty through satisfaction.

Service quality holds a strategic position because customers interact with banks through a combination of digital channels and human service. Reliability, responsiveness, assurance, and empathy can foster trust and positive experiences. Farida et al. (2025) demonstrate that service quality is related to banking customers' satisfaction and loyalty, while Tedjokusumo and Murhadi (2023) highlight the importance of satisfaction in the relationship between service quality and loyalty.

The research gap in this study lies in the differences in the results and contexts of previous studies. Rahardjo and Darma (2025) indicate that not all dimensions of online service quality are capable of increasing the sustainability of mobile banking usage. Regarding innovation, Nguyen et al. (2024) and Ratnasari et al. (2024) emphasize the role of value and satisfaction, whereas Surjono et al. (2025) highlight the importance of new service concepts and procedures. Furthermore, previous studies have largely focused on mobile banking, e-banking, or retail banking in general, leaving room to test the same model at Bank BJB's Kuningan Branch.

This study examines the simultaneous effects of banking digitization, product innovation, and service quality on customer loyalty at Bank BJB's Kuningan Branch. The study's contribution lies in providing empirical evidence at the branch level and identifying the most dominant factors influencing loyalty. It also offers practical implications regarding priorities for improving digital services, products, and customer service.

METHOD

This study employs a quantitative approach with a descriptive and confirmatory design. The research subjects are customers of Bank BJB's Kuningan Branch. Data were collected via a questionnaire using a five-point Likert scale and involved 100 respondents. The research variables

consist of banking digitalization (X1), product innovation (X2), service quality (X3), and customer loyalty (Y).

Variables	Symbol	Main Indicators
Banking Digitalization	X1	Convenience; access to information; speed; features; security; availability; reliability
Product Innovation	X2	Novelty; suitability to needs; added value; product variety
Service Quality	X3	Reliability; responsiveness; assurance; empathy
Customer Loyalty	Y	Repeat usage; retention; additional products; recommendations; positive attitude; resistance to competitors; trust

The analysis was conducted using descriptive statistics, instrument validation, classical assumption tests, multiple linear regression, t-tests, F-tests, and the coefficient of determination. The regression model is $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$. Hypothesis testing was conducted at a 5 percent significance level.

RESULTS AND DISCUSSION

All variables fell into the high category. Banking digitization received the highest rating, while product innovation received the lowest average score.

Variable	Average	Achievement	Category
Banking Digitalization	3.96	79.25%	High
Product Innovation	3.64	72.70%	High
Service Quality	3.84	76.85%	High
Customer Loyalty	3.92	78.37%	High

In banking digitalization, accessibility is the aspect rated highest, while digital security still needs improvement. In product innovation, product suitability to customer needs received the highest rating, while product novelty was rated the lowest. In service quality, reliability received the

highest rating, and responsiveness needs improvement. In loyalty, the desire to remain a customer received the highest score, while resilience against competitors remains a challenge.

Multiple Linear Regression and Hypothesis Testing

The regression equation obtained is $Y = 1.294 + 0.206X_1 + 0.063X_2 + 0.411X_3 + e$.

Variab les	B	Beta	t	Sig.	Decisi on
Bankin g Digitalization	0.206	0.254	2.783	0.006	H1 accepted
Produc t Innovation	0.063	0.060	0.722	0.472	H2 rejected
Service Quality	0.411	0.462	4.943	<0.001	H3 is accepted

Banking digitization has a positive and significant effect on loyalty. Product innovation has a positive but insignificant effect. Service quality has a positive and significant effect and has the largest standardized beta, making it the most dominant variable. Simultaneous Test and Coefficient of Determination

The F-test yielded a value of 24.587 with a significance level of <0.001. Thus, the three variables collectively have a significant effect on loyalty. The values are $R = 0.659$, $R^2 = 0.434$, and Adjusted $R^2 = 0.417$. The model explains 43.4% of the variation in customer loyalty, while 56.6% is influenced by other factors outside the model.

DISCUSSION

The Impact of Banking Digitalization on Loyalty

The research findings demonstrate that banking digitization has a positive and significant effect on loyalty. The coefficient of 0.206 indicates that the more favorable customers' perceptions of the convenience, benefits, security, and accessibility of digital services, the higher their loyalty. This finding is consistent with Ayinaddis et al. (2023), Beanning and Zulkarnain (2024), and Rahardjo and Darma (2025), who identify the quality of the digital experience as a key factor in the continued use of services.

However, the standardized beta for digitalization (0.254) is lower than that for service quality (0.462). This means that while strengthening digital channels is important, it has not yet replaced customers' need for high-quality service. Digital priorities must include app stability, transaction speed, security, feature completeness, and ease of access.

The Effect of Product Innovation on Loyalty

Product innovation has a positive but not significant effect on loyalty. A coefficient of 0.063 and a significance level of 0.472 indicate that innovation has not yet made a sufficiently strong unique contribution after controlling for digitalization and service quality. This finding differs from several studies that identified the influence of innovation through satisfaction, including those by

Nguyen et al. (2024) and Ratnasari et al. (2024). This discrepancy may suggest that new innovations are valuable for loyalty only if they are genuinely perceived as relevant, easy to understand, and beneficial.

The average value of product innovation, at 3.64, is the lowest among the study's variables. Therefore, product development needs to be more oriented toward the needs of customer segments, tangible added value, ease of use, and perceptible novelty.

The Effect of Service Quality on Loyalty

Service quality was the strongest finding. A coefficient of 0.411, $t=4.943$, and $p<0.001$ indicate a positive and significant effect. The standardized beta of 0.462 is the largest in the model. This finding supports Farida et al. (2025), Nadiyah et al. (2025), and Tedjokusumo and Murhadi (2023) regarding the importance of service quality in shaping satisfaction and loyalty.

Responsiveness is the aspect of service quality with the relatively lowest rating. Therefore, faster responses to questions and complaints, consistency of information, and problem resolution need to be prioritized for improvement.

Simultaneous Effects

The results of the F-test confirm that digitalization, product innovation, and service quality simultaneously have a significant effect on loyalty. Loyalty cannot be built through a single approach alone. Banks require a combination of user-friendly technology, relevant products, and high-quality service. Based on the standardized beta coefficients, service quality is the top priority, while digitalization and innovation serve to enhance the customer experience.

CONCLUSION

- Banking digitization has a positive and significant effect on customer loyalty at Bank BJB's Kuningan Branch.
- Product innovation has a positive but not significant effect on customer loyalty.
- Service quality has a positive and significant effect and is the most dominant variable influencing customer loyalty.
- Banking digitization, product innovation, and service quality simultaneously have a significant effect on customer loyalty. The model explains 43.4% of the variation in loyalty.

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