

Increasing Customer Loyalty Through Perceived Value, Digital Service Quality and Customer Satisfaction of Wonder by BNI Users (Case Study of BNI UNDIP Semarang Branch)

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Abstract. *This study aims to analyze strategies for increasing customer loyalty through the variables of perceived value, digital service quality, and customer satisfaction among Wondr by BNI application users, specifically at the BNI Undip Semarang Branch Office (KCP). The background of this research is based on the phenomenon of declining loyalty due to complaints about digital services and intense competition from digital banks and financial technology (fintech). The research method used was a quantitative approach with a survey. Sampling was conducted using an incidental sampling technique among customers using the Wondr by BNI application. Data were collected through a structured questionnaire with a Likert scale of 1-5 and analyzed using the Partial Least Squares (PLS) method to test the measurement model (outer model) and structural model (inner model). The results showed that all independent variables, namely perceived value and digital service quality, had average scores in the "Very High" category. Specifically, the indicator of ease of finding service information in the application received the highest rating. Data analysis confirms that customer satisfaction plays a significant role as a mediating variable, strengthening the relationship between digital service quality and perceived value on long-term customer loyalty. The study's conclusions emphasize that focusing on improving responsive application features, transaction security, and delivering value-for-money benefits is key to building loyalty in the digital banking era. Managerial implications suggest that BNI should continue to iterate features based on user feedback and strengthen employee digital literacy to maintain market share.*

Keywords: *Customer Loyalty; Customer Satisfaction; Digital Service Quality; Perceived Value; Wonder by BNI.*

1. Introduction

Customer loyalty is a key factor in increasing competitiveness in the banking industry, thereby maintaining market share. BNI, as a state-owned bank, continues to strive to improve service quality to maintain customer loyalty, especially in the era of banking digitalization. According to Kotler et al. (2018), customer loyalty is defined as a person's commitment to continue purchasing or using a service, despite various conditions that can influence decisions, as well as marketing efforts from competitors that have the potential to change consumer behavior. Customer loyalty is increasingly influenced by digital transformation, which encourages improvements in technology-based services based on artificial intelligence (Setianti et al., 2024).

Customer satisfaction Customer satisfaction is the feeling of satisfaction consumers experience when the product or service they receive meets or exceeds their expectations (Bernarto et al., nd). Furthermore, customer satisfaction can also be defined as the consumer's assessment of the product or service they have purchased (Wiradarma & Respati, 2020). When the perceived benefits of using a product or service are high, customers are more likely to make repeat purchases in the future.

Perceived value Perceived value refers to the benefits customers receive after comparing what they receive with what they spend (Hsiao, 2022). If the benefits received exceed the costs incurred, customers are more likely to consider repurchasing a product or service when its useful life expires. With the development of digital technology, the quality of e-services is key to determining customer satisfaction and loyalty in this digital era (Kotler et al., 2018). Banks in Indonesia continue to innovate by creating technology-based banking services to enhance the user experience (Zakiyatul Miskiyah et al., 2022).

However, despite various innovations, challenges remain in the quality of electronic services, such as technical disruptions, data security, and customer service responsiveness, which impact user satisfaction (Wijaya, 2024). Therefore, research on digital service quality in 2024 is crucial for understanding the factors influencing customer satisfaction and the improvement strategies that Bank BNI can implement to enhance its services.

The Wondr by BNI application is a form of digital banking service designed to provide convenience, security, and speed in conducting transactions via mobile devices (Hamzah et al., 2024). Several studies have assessed the service quality of this application using the SERVQUAL approach. The findings of these studies indicate that Wondr by BNI's service quality has a positive and significant influence on customer satisfaction levels. However, several obstacles are still frequently encountered by customers when using the application, such as forgetting the M-PIN, forgetting the transaction password, blocked accounts, not receiving the OTP code during registration, and the application being unable to open. Furthermore, other studies have revealed that Wondr by BNI's service quality significantly influences BNI Bank customer loyalty in several regions (Hamzah et al., 2024). Overall, although Wondr by BNI has provided adequate services, there are several aspects that need

to be improved to increase customer satisfaction and loyalty.

The following table illustrates the phenomenon of the BNI Bank customer loyalty gap during 2021-2023:

Table Gap Phenomenon

The Phenomenon of BNI Bank Customer Loyalty Gap	
	- Declining loyalty due to complaints about digital services and long queues at branches. - Competition with digital banks and fintech is starting to impact customer satisfaction. - Loyalty programs are still less effective in retaining existing customers.
	- Customer loyalty is starting to depend on improving the quality of digital services. - Customerfeel not enoughget personalized service. - Trust in the security of digital transactions remains a challenge.

This table shows how BNI Bank customer loyalty has changed from year to year, influenced by digital services, competition with fintech, and strategies to increase customer satisfaction.

Several studies indicate that perceived value has a significant impact on customer loyalty. For example, (Firmansyah et al., 2018) reported a positive effect of perceived value on customer loyalty. A similar finding was also found by (Sri Muryani & Muanas, 2025) who also found that perceived value did not contribute to customer loyalty. These differing findings indicate that the influence of perceived value on customer loyalty can vary depending on the industry, product, or service context studied. Therefore, it is important to consider contextual factors when evaluating the relationship between perceived value and customer loyalty.

Due to the variation in results from previous studies, the researcher included customer satisfaction variables as an effort to address the inconsistencies found in the research gap. Therefore, the proposed title in this study is "Increasing Customer Loyalty through Perceived Value, Digital Service Quality, and Customer Satisfaction Among wondr by BNI Users" (Case Study of BNI Undip Semarang Branch).

2. Research Methods

The method in this research uses a survey method, namely a quantitative approach carried out by collecting data from samples through the same structured questions for each respondent (Sugiyono, 2018).

The population of this study is customers who have used the Wondr by BNI Undip Semarang Branch application (the total population of all customers who use Wondr by BNI until 2025).

The sampling technique used incidental sampling (a sample that happened to be encountered by the researcher). The researcher distributed questionnaires to respondents, namely customers who made transactions at the bank directly, both savings and credit transactions. To determine the sample size from this population, the Cochran formula was used, which is appropriate for large populations with unknown numbers.

This study uses the SmartPLS application, which is designed to analyze complex data, particularly in social, business, and economic research. The advantage of this application is that it can process data with a more flexible model compared to conventional statistical methods. The SEM-PLS method is a variance-based Structural Equation Modeling approach that does not require special assumptions in its calculation process. The SEM-PLS method calculation has two output approaches: the structural model approach and the measurement model approach (Haryono, 2019).

3. Results and Discussion

3.1. The Influence of Perceived Value on Customer Loyalty

Based on the survey data provided, respondents' highest response to the customer loyalty variable was in the second indicator with a score of 4.42, namely "I prefer to transact again using wondr by BNI." This score (on a Likert scale, for example 1-5) indicates a strong level of agreement, where 4.42 is close to the maximum value. From this, it can be concluded that respondents tend to choose to transact again with wondr by BNI, which reflects a tendency for repeat use as a form of loyalty. Customer loyalty plays a crucial role in shaping the quality of digital services. Service providers like BNI can leverage this loyalty data for marketing strategies, such as loyalty programs that encourage retention and improve quality through innovation.

Perceived value is a customer's assessment of the benefits received compared to the cost or effort spent on a particular product or service. This value is not only related to price, but also to quality, convenience, service, experience, and emotional or social benefits perceived by customers. The higher the perceived value, for example through practical service, comprehensive features, or a pleasant experience, the more likely customers are to be satisfied and remain loyal to the brand or company. Customer loyalty is not only reflected in repeat purchases but also in positive attitudes such as recommending a product or not switching to a competitor, and this is strongly influenced by perceived value. For example, in digital banking services like wondr by BNI at BNI Undip Semarang, transaction convenience, comprehensive features, and loyalty programs such as sweepstakes or promotions have been shown to increase customer satisfaction and engagement. Previous research also shows that high perceived value, coupled with trust and emotional connection, positively influences customer loyalty.

3.1.1. The Influence of Digital Service Quality on Customer Loyalty

Based on the survey data provided, respondents' responses to the digital service quality variable were mostly on the first indicator with a score of 4.47 "I can easily find information about a digital service in the wondr by BNI application." This discussion examines the influence of digital service quality on customer satisfaction, focusing on survey data related to the wondr by BNI application. Digital service quality refers to the extent to which a service meets customer expectations in aspects such as ease of use, reliability, and efficiency. Customer satisfaction is an emotional response to the experience of using a service. The influence of quality on satisfaction occurs through meeting expectations, where high-quality digital services increase satisfaction, which in turn drives loyalty and retention. The survey data shows high scores on the quality indicator, which can be analyzed as an indication of how service quality contributes to customer satisfaction.

Digital service quality is a measure of how well a service through a digital platform, such as an app or website, meets customer needs and expectations, including ease of use, response time, data security, system reliability, and a pleasant experience. Quality digital services not only simplify interactions but also increase customer satisfaction and build trust in the company. This satisfaction then drives loyalty, which is reflected in repeat use, recommendations to others, and a reluctance to switch to competitors. For example, wondr by BNI at BNI Undip Semarang offers convenient transactions, comprehensive features, and consistent service, thereby increasing customer engagement and differentiating the service amidst digital banking competition. Furthermore, high digital service quality can have long-term positive effects, such as emotional loyalty, a better company reputation, and opportunities to develop new services tailored to customer needs. Conversely, a poor digital service experience can decrease satisfaction and increase the risk of customers switching to competitors. Therefore, companies' focus on improving digital service quality is a crucial strategy for retaining customers, strengthening loyalty, and supporting business growth in the digital era.

3.1.2. The Influence of Customer Satisfaction on Customer Loyalty

Based on the survey data provided, respondents' responses to the customer satisfaction variable were mostly found in the third indicator with a score of 4.38, "The experience of using the Wondr by BNI application meets my expectations of ideal service." Customer loyalty and customer satisfaction are two key concepts in marketing and business management. Customer satisfaction refers to the degree to which a customer's experience meets or exceeds their expectations of a product or service. Meanwhile, customer loyalty is the tendency of customers to continue using a product or service. or a particular service, often reflected in repeat purchases, recommendations, and resilience against competitors. The relationship between the two is often causal: high satisfaction tends to increase loyalty, although loyalty can also influence perceptions of satisfaction through repeated

experiences. Based on the survey data provided, this discussion will analyze the effect of loyalty on customer satisfaction, focusing on the highest-recorded satisfaction indicators.

Customer satisfaction is the level of pleasure or satisfaction experienced by customers when a product or service meets or exceeds their expectations, whether in terms of quality, price, service, or interaction experience. This satisfaction not only influences positive perceptions of the company but also builds trust and emotional bonds that form the basis of loyalty. Customer loyalty is evident in repeat purchases, recommendations to others, and a willingness to continue using a product or service despite the availability of alternatives from competitors. The relationship between satisfaction and loyalty is strong: satisfied customers are more likely to remain loyal, while dissatisfaction increases the risk of switching to competitors. For example, with the digital service wondr by BNI at BNI Undip Semarang, customers who experience convenient transactions, comprehensive features, ease of use, and consistent service demonstrate high levels of satisfaction, which then encourages them to continue using the service and recommend it to others. Furthermore, high satisfaction also enables companies to build long-term loyalty, strengthen customer relationships, increase retention, support revenue growth, and strengthen the company's reputation amidst increasingly fierce digital banking competition. Therefore, companies' focus on improving the quality of products, services, and customer experience is a key strategy for creating stable and sustainable loyalty.

Based on the table above, it is obtained that the average score of respondents on the customer satisfaction variable is 4.30, which is included in the very high category. Respondents who answered "Wondr by BNI service is responsive and helpful" disagreed 1 person, disagreed 3 people, neutral 6 people, agreed 50 people and strongly agreed 40 people. The score value on the first statement is 4.25 which means it is included in the very high category, meaning that more respondents answered agree. Then on the second question "I feel happy with the wondr by BNI service" disagreed 1 person, disagreed 4 people, neutral 3 people, agreed 49 people and strongly agreed 43 people. The score value on the second statement is 4.29 which means it is included in the very high category, meaning that more respondents answered agree. Then on the question "The experience of using the wondr by BNI application meets my expectations about ideal service" disagreed 1 person, disagreed 4 people, neutral 5 people, agreed 36 people and strongly agreed 54 people. The score for the third statement is 4.38, which means it is in the very high category, meaning that more respondents answered strongly agree.

Data Analysis

In this study, data was analyzed with the help of software SmartPLS (Partial Least Squares Structural Equation Modeling). SmartPLS is a statistical method used to examine relationships between variables, both latent and directly measurable. This technique is included in variance-based SEM and is suitable for research with complex models, such as those involving multiple latent variables, indicators, and relationships between variables.

Evaluation of Measurement Model Analysis (Outer model)

Use The outer model aims to evaluate the validity and reliability of a construct. Through this approach, researchers can illustrate the relationship between latent variables and the indicators that measure them. The outer model also plays a role in assessing the loading factor values for each indicator. According to Ghozali (2021), an indicator is considered good if its loading value is above 0.70. If the loading value is below this limit, the indicator is considered less effective in representing the intended construct. However, in research still in the early stages of measuring instrument development, loading values between 0.50 and 0.60 are still tolerable.

3.2. The Influence of Perceived Value on Customer Satisfaction

The influence of perceived value on customer satisfaction is evident in how much customers assess the benefits they receive compared to the costs, time, or effort expended. Perceived value is subjective because each customer has different expectations, priorities, and perceptions, so the same experience can result in varying levels of satisfaction. Perceived value is influenced by product or service quality, price, brand reputation, ease of access, convenience of use, and interaction with the company. Customers tend to be satisfied if the benefits they receive match or exceed expectations, while low value can decrease satisfaction and impact loyalty and brand perception. For example, with the digital service wondr by BNI at BNI Undip Semarang, customers who experienced easy transactions, comprehensive features, and responsive service showed high satisfaction, which encouraged them to continue using the service and build long-term loyalty. Therefore, increasing perceived value through quality products, reasonable prices, and positive customer experiences is key for companies to strengthen satisfaction, loyalty, and brand image.

3.2.1. The Influence of Digital Service Quality on Customer Satisfaction

The influence of digital service quality on customer satisfaction can be seen from how well digital services consistently meet customer needs, expectations, and preferences. Digital service quality encompasses various aspects, such as application ease of use, transaction speed and accuracy, data security, system reliability, service team responsiveness, and the service's ability to provide a pleasant and satisfying experience. Quality service not only facilitates customer interactions with the company but also increases trust and comfort of use. In the context of wondr by BNI at BNI Undip Semarang, customers who experience fast transactions, comprehensive features, a secure system, and responsive service support tend to show high levels of satisfaction. This satisfaction then drives loyalty, where customers not only regularly use the service but also recommend it to others. Furthermore, high digital service quality helps companies build a positive image, increase customer retention, and strengthen long-term relationships with customers amidst increasingly fierce digital banking competition. Therefore, focusing on improving digital service quality is a key strategy for companies to maintain satisfaction, build loyalty, and support sustainable business growth.

4. Conclusion

This study has several limitations that need to be acknowledged for the context of interpretation of the results and directions for future research: 1. Sample Size and Representation: The sample is limited to Wondr by BNI users at the Undip Semarang branch, who are mostly students, so the results may not be generalizable to other customer segments such as professionals, self-employed, or the elderly. The use of purposive sampling may introduce bias, as respondents were selected based on accessibility. 2. Method of collecting data: Quantitative surveys using online questionnaires may be affected by self-reporting bias, where respondents tend to give positive answers (social desirability bias). The lack of triangulation with qualitative methods, such as in-depth interviews, limits the depth of understanding of subjective factors such as customer emotions. 3. Variables and Models: The study focused on three main variables (perceived value, digital service quality, and customer satisfaction), but did not consider external variables such as market competition, economic conditions, or changes in banking regulations that could influence loyalty. The regression model used may not capture non-linear interactions or moderating effects. 4. Temporal Limitations: Data was collected over a specific period, so it doesn't reflect long-term fluctuations, such as the impact of a pandemic or app updates. Data accessibility is limited to a single branch, which reduces external validity.

5. References

Journals:

- Amin, M. (2016). Internet banking service quality and its implications on e-customer satisfaction and e-customer loyalty. *International Journal of Bank Marketing*, 34(3), 280–306. <https://doi.org/10.1108/IJBM-10-2014-0139>.
- Andini, CA (2016). The Influence of E-Service Quality on Purchase Intention of Visitors to the Lazada Indonesia Online Store. *eProceedings of Management*, 3(2).
- Candra, L. &. (2012). The Influence of Service Quality and Perceived Value on Satisfaction and Loyalty. *DeReMa Journal of Management*, 7(2), pp. 19-31.
- Chen, C.-F. &.-H. (2008). Perceived Value, Satisfaction and Loyalty of TV Travel Product Shopping: Involvement as a Moderator. *Journal of Tourism Management*, 29, pp.1166 –1171.
- Gultom. (2016). The Influence of Service Quality, Product Quality, and Perceived Value on Customer Satisfaction and Loyalty in the Perhutani Timber Industry. *Journal of Management and Agribusiness*, 13(2), pp. 109-121.
- Hidayat, R. (2009). The Influence of Service Quality, Product Quality, and Customer Value on Bank Mandiri Customer Satisfaction and Loyalty. *Journal of Management and Entrepreneurship*, (Vol. 11 No. 1 March 2009).

- Johnson. (1996). The American Customer Satisfaction Index: Nature, Purpose, and Findings. *Journal of Marketing*, Vol 60, p.7-18.
- Kapferer, J. N. (1993). Further evidence on the consumer involvement profile: five antecedents of involvement. *Psychology & marketing*, 10(4), 347-355.
- Odin. (2001). Conceptual and Operational Aspects of Brand Loyalty. An Empirical Investigation. *Journal of Business Research*, 53(2), 75-84.
- Palilati. (2007). The Influence of Customer Value and Satisfaction on Customer Loyalty of Bank Savings Accounts in South Sulawesi.
- Pearson, A. T. (2012). The role of e-service quality and information quality in creating perceived value: antecedents to web site loyalty. *Information Systems Management*. 29(3), 201-215.
- Rich, B.B. (2019). The Moderating Role of Website Familiarity in the Relationships Between e-Service Quality, e-Satisfaction and e-Loyalty. *Journal of Internet Commerce*, 18(4), 369–394. <https://doi.org/10.1080/15332861.2019.1668658>.
- Samuel, H. d. (2009). Service Quality, Perceived Value, Satisfaction, Trust, and Loyalty at PT. Kereta Api Indonesia According to Surabaya Customer Assessments. *Journal of Marketing Management*, Vol. 4, No. 1, pp. 23-37, 2009.
- Shoki M., FH (2012). Relationship Between Customers' Perceived Values, Satisfaction And Loyalty Of Mobile Phone Users. *Review of Integrative Business & Economic Research*, 1(1), pp.126-135.
- Sugiati. (2013). The Role of Customer Value on Satisfaction and Loyalty (Study on Hypermart's Customers). *International Journal of Business and Management Invention*, 2(6), pp.65-70.
- Tu, Y. L. (2013). An Empirical Study of Corporate Brand Image, Customer Perceived Value and Satisfaction on Loyalty in Shoe Industry. *ournal of Economics and Behavioral Studies*, 5(7), pp.469-483.
- Yeung, I. &. (2012). Relationships among Service Quality, Value, Customer Satisfaction and Loyalty in a Hong Kong Harbor Cruise. *Journal Department of Management Sciences*, 1(1), pp.1-14.

Books:

- Barnes, J. (2011). *Secrets of Customer Relationship Management*. Yogyakarta: Andi Offset.
- Kotler, A. d. (1996). *Marketing Basics*. Jakarta: Intermedia.

Kotler, P. (2011). Social Marketing: Influencing Behaviors for Good. US. Sage Publications, Inc.

Kotler, P. (2018).

Tjiptono, F. (2014). Marketing Services: Principles, Applications, and Research. Yogyakarta: Andi Offset.