

Transforming Banking Experiences: The Effectiveness of Sharia Management in Boosting Customer Satisfaction in Makassar

Awaluddin¹, Haeruddin Saleh²

Abstract

The growth of the Islamic banking industry in Makassar has shown significant progress; however, a thorough analysis of the factors influencing customer loyalty is still needed. This study aims to analyze the impact of product innovation, service quality, and transaction security on customer satisfaction and loyalty in Islamic banks in Makassar. Structural Equation Modeling (SEM) using AMOS was applied to data collected from 400 Islamic bank customers. The results indicate that service quality (estimate 0.253, C.R. 3.229) and transaction security (estimate 1.581, C.R. 3.216) have a significant impact on customer satisfaction. Product innovation also significantly affects customer satisfaction (estimate 0.723, C.R. 6.484) but does not significantly influence loyalty (estimate 0.130, C.R. 0.545, P 0.693). Conversely, customer satisfaction significantly affects loyalty (estimate 0.234, C.R. 2.534, P 0.027). The implications of this study highlight the importance of improving service quality and transaction security to enhance customer satisfaction and loyalty. Islamic banks should continue to develop innovative products and provide ongoing education to customers to maintain and boost their loyalty.

Keywords: *Customer Loyalty; Customer Satisfaction; Service Quality; Product Innovation; Transaction Security; Islamic Banks.*

Introduction

The global financial system has increasingly embraced Islamic banking as a re-sponse to a growing demand for financial products that adhere to Sharia principles (Aysan et al., 2022; Hanieh, 2020; Rabbani et al., 2021). Islamic banking, distinguished by its prohibition of interest (riba), avoidance of excessive uncertainty (gharar), and adherence to ethical standards, represents a significant shift in global financial practices (Abasimel, 2023; Alam, 2024; Eyerci & Eyerci, 2021). This sector's growth reflects a broader trend towards incorporating ethical and religious values into financial systems, aiming to offer more inclusive and responsible financial solutions (Khan & Bhatti, 2008).

In recent decades, Islamic banking has expanded across various regions, demonstrating significant success in diverse economic environments. For instance, the Middle East and North Africa (MENA) region has been a pioneer, with substantial market penetration and a well-established framework for Islamic financial institutions (Al Bashir, 2022; Chaffai, 2020; Moudud-Ul-Huq et al., 2022). However, the potential for Islamic banking extends far beyond these traditional markets. Southeast Asia, with its substantial Muslim populations, represents a burgeoning market for Islamic financial services, reflecting a growing trend towards Sharia-compliant financial products in emerging economies (Hanieh, 2020; Kok et al., 2022; Randeree, 2020).

Indonesia, as the country with the largest Muslim population globally, has a particularly significant role in the Islamic banking sector. Despite its large Muslim demographic, the penetration of Islamic banking in Indonesia remains relatively low. Approximately 87.18% of Indonesians adhere to Islam, yet only about 5.86% are customers of Islamic banks (Antikasari, 2023; Hosen et al., 2021; Suzuki et al., 2020). This discrepancy highlights both the challenges and opportunities within the Indonesian market. The Islamic banking sector in Indonesia is at a critical juncture, where growth potential is substantial, but achieving higher market penetration requires addressing specific challenges and barriers. Key challenges include a lack of awareness about Islamic banking principles and products, limited access to Islamic banking services in rural areas, and perceived complexity of Sharia-compliant financial products (Arifin, 2021; Ishak & Asni, 2020). Additionally, competition from conventional banks, which often have more established networks

¹ Faculty of Islamic Economics & Business, Universitas Alauddin Makassar, Indonesia. E-mail: awaluddin@uin-alauddin.ac.id.

² Faculty of Economics and Business Universitas Bosowa, Indonesia. E-mail: haerud-din@universitasbosowa.ac.id.

and resources, further complicates the landscape for Islamic banks (Hassanein & Mostafa, 2023; Ustaoglu & Yildiz, 2023). To overcome these barriers, strategic efforts are needed to enhance financial literacy regarding Islamic banking, improve the distribution network, and simplify product offerings to align with customer expectations and needs. Leveraging digital banking innovations and targeted marketing campaigns can also play a pivotal role in bridging the gap between Islamic banks and potential customers (Suandi et al., 2023). By addressing these factors, the Islamic banking sector in Indonesia can un-lock its growth potential and increase its market share, ultimately contributing to a more inclusive and robust financial system.

Makassar, an economic hub in Eastern Indonesia, has emerged as a significant player in the region's Islamic finance sector. The city has witnessed considerable growth in Islamic banking, with banks playing a pivotal role in providing Sharia-compliant credit and financial services (Latief & Nashir, 2020; Mashum & Marlina, 2020). Recent data indicates a consistent rise in customer numbers and transaction volumes at Islamic banks in Makassar. This trend underscores the expanding role of Islamic banks in the local economy and highlights the growing acceptance of Sharia-compliant financial practices among the city's residents. However, Islamic banks in Makassar face several challenges that could impact their continued growth and effectiveness. One critical issue is maintaining high service quality while adhering to Sharia principles. Customers of Islamic banks often have high expectations for both efficiency and compliance with religious standards, which can lead to complex and varied demands (Abror et al., 2020; Ahmed et al., 2022; Asnawi et al., 2020; Usman et al., 2022; Zouari & Abdelhedi, 2021). Balancing these expectations requires a nuanced approach to service delivery, product innovation, and operational practices. Another significant challenge is ensuring robust transaction security. As the digital transformation of banking accelerates, concerns related to data protection and financial security become more pronounced. Issues such as cybersecurity threats and data breaches can undermine customer trust and pose serious risks to the stability of banking systems (Hassan et al., 2020; Hosen et al., 2021; Sen et al., 2020).

Despite existing research on Sharia management, customer satisfaction, and loyalty (Ahmed et al., 2022; Mulia et al., 2021; Santoso & Alawiyah, 2021), gaps remain in understanding how these factors interact to influence customer loyalty, particularly within the context of Islamic banks in Makassar, Indonesia. Many studies address service quality, product innovation, and transaction security in isolation, but few explore their combined effects on customer satisfaction and loyalty. Furthermore, research specifically focused on Islamic banks in Makassar, a region with unique demographic and economic characteristics, is limited. This study aims to fill these gaps by providing an integrative analysis of the three main factors and evaluating the role of customer satisfaction as an intervening variable.

This study aims to address these challenges by evaluating the effectiveness of Sharia management in enhancing customer satisfaction at Islamic banks in Makassar. Specifically, it will explore how product innovation, service quality, and transaction security impact customer satisfaction and how satisfaction mediates the relationship between these factors and customer loyalty. Previous research has established that service quality and transaction security are significant determinants of customer satisfaction in various banking contexts (Abror et al., 2020; Ahmed et al., 2022; Additionally, product innovation plays a crucial role in enhancing customer loyalty and satisfaction (Hosen et al., 2021; Mulia et al., 2021; Sen et al., 2020). This study seeks to provide a comprehensive analysis of these factors and their interrelationships. The significance of this research lies in its ability to offer practical recommendations based on empirical findings. By examining the combined effects of service quality, product innovation, and transaction security on customer satisfaction and loyalty, this study will contribute valuable insights to the field of Islamic banking. As such, this research represents a crucial step towards understanding and improving Sharia management practices in Islamic banking. By addressing both global trends and local challenges, it provides a nuanced perspective on the dynamics of Islamic banking in Makassar and offers actionable insights for advancing the sector.

Literature Review and Hypothesis Development

The Development of Islamic Bank in Indonesia

Islamic banking has experienced significant growth and development in Indonesia, driven by the country's large Muslim population and the increasing demand for Sharia-compliant financial services. The roots of Islamic banking in Indonesia can be traced back to the establishment of Bank Muamalat Indonesia in 1991, which marked the beginning of a new era in the country's financial sector. Since then, the sector has expanded rapidly, with numerous Islamic banks and financial institutions entering the market, each striving to offer innovative products and services that adhere to Islamic principles. This growth has been supported by strong regulatory frameworks and policies from the Indonesian government, including the enactment of Law No. 21 of 2008 concerning Sharia Banking, which provides a solid legal foundation for the operation of Islamic banks.

The development of Islamic banking in Indonesia is also characterized by its commitment to social justice and economic equality, principles that are central to Sharia law. Islamic banks operate on the basis of profit-sharing and risk-sharing, avoiding interest (riba) which is prohibited in Islam (Abasimel, 2023; Alam, 2024; Eyerci & Eyerci, 2021). Instead, they engage in trade-based transactions and investment partnerships, such as mudarabah (profit-sharing) and musharakah (joint venture). This approach not only aligns with the religious beliefs of Muslim consumers but also appeals to those seeking ethical and socially responsible banking options (Nor & Ismail, 2020; Nouman & Ullah, 2023). Moreover, the Indonesian Islamic banking sector has shown resilience and adaptability in the face of global economic challenges. The global financial crisis of 2008, for instance, had a less severe impact on Islamic banks compared to their conventional counterparts, due to their adherence to asset-backed financing and prudent risk management practices (Abduh, 2020; Akbar et al., 2021; Wang & Luo, 2020). This resilience has bolstered confidence in Islamic banking and has attracted a broader customer base, including non-Muslims who are interested in its ethical and stable financial practices.

In recent years, the digital revolution has also played a crucial role in the development of Islamic banking in Indonesia. The adoption of digital technologies has enabled Islamic banks to enhance their service delivery, improve customer experience, and reach a wider audience. Mobile banking, online transactions, and fintech innovations have become integral to the operations of Islamic banks, making banking more accessible and convenient for customers. For instance, mobile banking applications have facilitated instant fund transfers, bill payments, and account management, thus eliminating the need for physical branch visits and reducing transaction times (Aysan et al., 2022; Zouari & Abdelhedi, 2021). Online transactions have similarly enabled customers to conduct banking activities at their convenience, significantly enhancing user satisfaction (Jebarajakirthy & Shankar, 2021; Shankar & Rishi, 2020; Shankar, 2021). Fintech innovations, such as blockchain technology and artificial intelligence, have also been adopted by Islamic banks to streamline processes and enhance security. Blockchain, for example, has been utilized to ensure the transparency and integrity of financial transactions, aligning with the Islamic principles of honesty and trust (Aysan et al., 2022; Unal & Aysan, 2022). Artificial intelligence, on the other hand, has been employed to improve customer service through chatbots and personalized financial advice, thereby increasing customer engagement and loyalty (Akyüz & Mavnacıoğlu, 2021; Gigante & Zago, 2023; Ridha & Haura Maharani, 2022). These technological advancements have further accelerated the growth of the sector, allowing Islamic banks to compete more effectively with conventional banks. The ability to offer comparable, if not superior, digital services has attracted a broader customer base, including tech-savvy millennials who prefer digital banking solutions (Bhatnagr & Rajesh, 2024; Windasari et al., 2022). Moreover, the integration of digital platforms has enabled Islamic banks to expand their reach to remote and underserved areas, promoting financial inclusion and supporting economic development (Abubakar & Aysan, 2023; Jouti, 2021).

The digital transformation of Islamic banking has not only enhanced operational efficiency but also reduced costs associated with traditional banking methods. By leveraging digital channels, Islamic banks have been able to optimize resource allocation, reduce overheads, and pass on the benefits to customers in the form of lower fees and better returns (Nugraheni & Muhammad, 2024; Suandi, 2023). This cost-effectiveness, combined with the ethical appeal of Sharia-compliant banking, has strengthened the competitive position of Islamic banks in the Indonesian financial landscape. Furthermore, the digitalization

of Islamic banking has facilitated better regulatory compliance and risk management. Advanced data analytics and real-time monitoring systems have enabled Islamic banks to detect and mitigate risks more effectively, ensuring the stability and reliability of their operations (Atif et al., 2021; Chong, 2021). This capability is particularly important in maintaining customer trust and safeguarding the integrity of the financial system. In a nutshell, the digital revolution has significantly contributed to the development of Islamic banking in Indonesia. The adoption of mobile banking, online transactions, and fintech innovations has enhanced service delivery, improved customer experience, and expanded the reach of Islamic banks. These technological advancements have accelerated the sector's growth, enabling Islamic banks to compete effectively with conventional banks while promoting financial inclusion and economic development. The continuous integration of digital technologies will likely play a pivotal role in shaping the future of Islamic banking in Indonesia, driving further growth and innovation (Abdul Rahim et al., 2021; Qudah et al., 2023).

Despite the significant progress, the Islamic banking sector in Indonesia still faces several challenges. These include the need for continuous improvement in regulatory frameworks, increasing competition from conventional banks, and the necessity to educate the public about the benefits and principles of Islamic banking. Addressing these challenges requires a concerted effort from all stakeholders, including the government, financial institutions, and the broader community. As such, the development of Islamic banking in Indonesia is a testament to the country's commitment to providing diverse financial services that cater to the needs of its population. The sector's growth is under-pinned by strong regulatory support, ethical banking practices, and technological innovation. As Islamic banks continue to evolve and adapt to changing market dynamics, they are well-positioned to contribute significantly to Indonesia's economic development and financial inclusion goals.

Impact of Product Innovation toward Customer Satisfaction

Product innovation is a crucial factor influencing customer satisfaction in the banking industry, including Islamic banks. In the context of Islamic banking, product innovation involves developing new Sharia-compliant financial products and services that meet the evolving needs and preferences of customers. The introduction of innovative products can enhance the attractiveness of Islamic banks, improve customer experiences, and ultimately lead to higher levels of customer satisfaction. One key area of product innovation in Islamic banking is the development of investment products that adhere to Sharia principles. For instance, Islamic banks have introduced various types of Sukuk (Islamic bonds) that provide customers with profitable and ethically sound investment opportunities (Uluyol, 2023). These innovative investment products attract customers seeking Sharia-compliant options and cater to the broader market interested in ethical and sustainable investments (Salhani & Mouselli, 2024; Smaoui & Ghouma, 2020). Another example of product innovation is the introduction of Islamic credit cards, which operate on a profit-sharing or fee-based model rather than interest-based lending (Alhusban et al., 2021; Jamshidi & Kuanova, 2022). These credit cards offer the convenience and benefits of traditional credit cards while adhering to Islamic principles, thus enhancing customer satisfaction among Muslim consumers who prefer Sharia-compliant financial solutions. Furthermore, Islamic banks have been innovative in designing savings and deposit products that offer competitive returns while complying with Islamic law. Products such as Mudarabah savings accounts and Wadiah current accounts provide customers with profit-sharing opportunities and security, respectively (Ahmad et al., 2023; Ruslan et al., 2021). These products have been well-received by customers, as they align with their religious beliefs and provide attractive financial benefits. In a nutshell, product innovation plays a vital role in influencing customer satisfaction in Islamic banking. By introducing new and Sharia-compliant financial products, Islamic banks can meet the diverse needs and preferences of their customers, enhance their competitive advantage, and foster customer loyalty. In light of the preceding discussion, the hypothesis is formulated as follows:

Hypothesis 1a: Product innovation in Islamic banking positively impacts customer satisfaction.

Impact of Service Quality toward Customer Satisfaction

Service quality is a critical determinant of customer satisfaction in the banking sector, including Islamic banks. It encompasses dimensions such as reliability, responsiveness, assurance, empathy, and tangibles,

each playing a significant role in shaping customer experiences. Reliability refers to the bank's ability to perform promised services dependably and accurately, ensuring strict adherence to Sharia principles. Consistent and accurate processing of Sharia-compliant financing contracts like Murabaha (cost-plus financing) enhances customer trust and satisfaction (Rabbani et al., 2021; Çokgezen, 2022). Responsiveness, or the willingness to help customers and provide prompt services, is crucial. Islamic banks offering timely responses to inquiries and efficient transaction processing see higher customer satisfaction. Quickly resolving concerns about Mudarabah savings accounts, for example, leads to positive customer experiences (Zeitun & Anam 2024). Assurance involves the knowledge and courtesy of employees and their ability to inspire trust and confidence. Customers expect staff to be knowledgeable about Islamic finance principles and to provide trustworthy advice. Well-trained employees enhance customer satisfaction (Sangpikul, 2023). Empathy, or providing caring and individualized attention, contributes to customer satisfaction. Islamic banks that address the unique financial needs of their customers foster stronger relationships and loyalty. Personalized financial planning services aligned with ethical and religious beliefs greatly enhance satisfaction (Sarofim, 2020). Tangibles, including physical facilities and the appearance of personnel, impact customer perceptions. Modern banking facilities and professional staff improve the overall customer experience. A well-designed banking app offering seamless navigation significantly boosts satisfaction (Gao et al., 2020). In conclusion, service quality is vital in influencing customer satisfaction in Islamic banking. Ensuring reliability, responsiveness, assurance, empathy, and high-quality tangibles allows Islamic banks to meet and exceed customer expectations, thereby enhancing satisfaction and loyalty. Based on the foregoing, the following hypothesis is proposed:

Hypothesis 1b: Service quality in Islamic banking positively impacts customer satisfaction.

Impact of Transaction Security toward Customer Satisfaction

Transaction security is a pivotal factor influencing customer satisfaction in the banking industry, especially for Islamic banks. Ensuring the security of financial transactions and protecting customer data are fundamental to building trust and maintaining customer loyalty. As digital banking becomes more prevalent, robust security measures have become increasingly important. Islamic banks must implement stringent security protocols to safeguard customer transactions. These protocols include encryption technologies, multi-factor authentication, and real-time fraud detection systems. Encryption ensures that sensitive customer information is protected during transmission, preventing unauthorized access (Seth et al., 2022; van Daalen, 2023). Multi-factor authentication adds an additional layer of security by requiring customers to verify their identity through multiple means, such as passwords, biometrics, or one-time codes (Mostafa et al., 2023). Real-time fraud detection systems are also critical in identifying and mitigating potential threats. These systems monitor transaction patterns and flag any suspicious activities for further investigation. By promptly addressing security breaches, Islamic banks can prevent financial losses and reassure customers of their commitment to protecting their assets (Chhabra Roy & Prabhakaran, 2023; Taherdoost, 2021). Furthermore, Islamic banks need to maintain transparency in their security practices. Educating customers about the measures in place to protect their transactions can enhance their confidence and satisfaction. Providing clear communication about security policies and offering guidance on safe banking practices empowers customers to take an active role in safeguarding their accounts (Li et al., 2021; Miao et al., 2022). The impact of transaction security on customer satisfaction extends beyond the prevention of fraud. A secure banking environment fosters trust, which is crucial for customer retention and loyalty. Customers who feel confident in the security of their transactions are more likely to continue using the bank's services and recommend them to others (Hanif & Lallie, 2021; Singh & Srivastava, 2020; Zhou et al., 2021). In conclusion, transaction security is essential for maintaining customer satisfaction in Islamic banking. By implementing robust security measures, educating customers, and ensuring transparency, Islamic banks can build trust and enhance customer loyalty. Based on the discussions above, the hypothesis is as follows:

Hypothesis 1c: Transaction security in Islamic banking positively impacts customer satisfaction.

Factors Affecting Customer Loyalty

Customer loyalty is a critical goal for Islamic banks as it directly impacts long-term profitability and growth. Several factors contribute to building and maintaining customer loyalty, including customer satisfaction, trust, service quality, and perceived value (Marcos & Coelho, 2022; Nguyen et al., 2021; Uzir et al., 2021). Customer satisfaction is a primary driver of loyalty. Satisfied customers are more likely to remain with their bank and recommend its services to others. This satisfaction stems from consistently meeting or exceeding customer expectations through quality products, excellent service, and secure transactions (Cotarelo et al., 2021; Hallencreutz & Parmler, 2021; Javed et al., 2021). In Islamic banking, adherence to Sharia principles also enhances satisfaction and loyalty among Muslim customers (Ahmed et al., 2022). Trust is another essential factor influencing loyalty. Customers need to trust that their bank operates with integrity and transparency, safeguarding their interests. Trust is built through reliable service, secure transactions, and ethical practices. Islamic banks, by adhering to Sharia principles, inherently foster trust as they commit to ethical financial practices (Al-Adwan et al., 2020; Aslam et al., 2020). Service quality significantly impacts customer loyalty. High-quality service that is responsive, reliable, and empathetic encourages customers to continue using the bank's services. For Islamic banks, this includes providing knowledgeable advice on Sharia-compliant financial products and delivering excellent customer service (Fida et al., 2020; Supriyanto et al., 2021). The overall customer experience, including digital and physical interactions, contributes to perceived service quality. Perceived value, or the customers' evaluation of the benefits received relative to the costs incurred, also affects loyalty. Customers who perceive that they are getting good value for their money are more likely to remain loyal. This includes competitive pricing, attractive product offerings, and additional benefits such as loyalty programs or rewards (Khan et al., 2022; Uzir et al., 2021). For Islamic banks, perceived value is also tied to the ethical and social benefits of Sharia-compliant banking. In summary, customer loyalty in Islamic banking is influenced by multiple factors, including customer satisfaction, trust, service quality, and perceived value. By focusing on these areas, Islamic banks can foster strong customer relationships and enhance loyalty. Considering the above arguments, we hypothesize that:

Hypothesis 2: There is a significant positive relationship between customer satisfaction and customer loyalty in Islamic banking.

Methodology

Research Design

This study employed a quantitative research design as advocated by (Clark et al, 2021) with a cross-sectional approach to analyze the impact of product innovation (X1), service quality (X2), and transaction security (X3) on customer satisfaction (Z), and how customer satisfaction mediates the relationship between these factors and customer loyalty (Y) at Islamic Banks in Makassar (See Figure 1). This design was chosen to provide a clear depiction of the relationships between the studied variables at a specific point in time, as well as to obtain relevant and representative data regarding customer perceptions of Islamic banking services. The study explores the significant effects of service quality, product features, and promotions on consumer satisfaction.

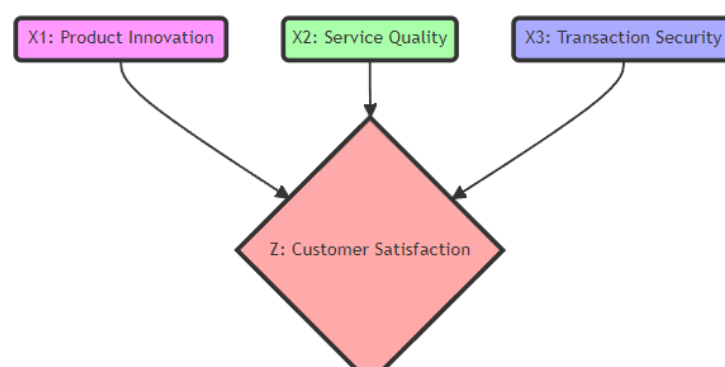


Figure 1. Relationships between Product Innovation, Service Quality, Transaction Security, Customer Satisfaction, and Loyalty

Population and Sample

The study targets the population of South Sulawesi, with a particular emphasis on residents of Makassar. The sample consists of Islamic bank customers residing in Makassar, selected using purposive sampling. This sampling method was chosen to ensure that participants meet specific criteria, such as having been a customer for at least six months, which is crucial for assessing informed and relevant engagement with Sharia banking services. Purposive sampling is employed to focus on individuals who have substantial experience with Islamic banking, thereby providing insights into customer decision-making processes and service engagement. This approach ensures that the sample is not only representative of the target demographic but also capable of yielding in-depth and pertinent data. The demographic profile of the participants includes a diverse range of age groups, income levels, and educational backgrounds, reflecting the broader population of Islamic bank customers in Makassar. This includes young professionals, middle-aged individuals, and retirees, with varying levels of education and income. By capturing this diversity, the study aims to generate findings that are broadly applicable to the Islamic banking sector in Makassar and potentially extendable to similar contexts.

Research Instrument

Data were collected using a self-developed questionnaire, meticulously designed based on themes identified in pertinent literature, including Ahmed et al. (2022), Hassanein and Mostafa (2023), Ustaoglu and Yildiz (2023), and Zouari and Abdelhedi (2021). The development process involved a pilot test and expert reviews to ensure the reliability and validity of the instrument. The questionnaire comprises a series of closed-ended questions organized around key themes: service quality, product innovation, transaction security, customer satisfaction, and customer loyalty. Each research variable was measured through various items, with some items adapted from established scales and others newly created based on the literature review.

Data Analysis

Data analysis was performed using Structural Equation Modeling (SEM) to examine the complex relationships among the research variables (Mueller & Hancock, 2018). SEM was particularly suited for this study as it allowed for the simultaneous evaluation of multiple direct and indirect interactions between variables, such as service quality, product innovation, transaction security, customer satisfaction, and customer loyalty. This comprehensive approach helped to uncover intricate causal pathways and interdependencies that might not have been evident through simpler analytical methods. By employing SEM, the research aimed to achieve a deeper understanding of how these variables influenced each other and contributed to overall customer outcomes. The analysis was conducted using advanced SEM software, such as AMOS or SmartPLS, to ensure the accuracy, validity, and robustness of the research results.

Results

Development of Islamic Banks in Makassar

The banking industry in Indonesia began a new chapter with the establishment of PT Bank Syariah Indonesia Tbk (BSI), officially launched on February 1, 2021. BSI resulted from the merger between PT Bank BRI Syariah Tbk, PT Bank Syariah Mandiri, and PT Bank BNI Syariah, with the Financial Services Authority (OJK) issuing the merger approval on January 27, 2021 (OJK Decree No. 04/KDK.03/2021). BSI holds significant potential to grow and become part of the leading global Islamic banking group. In addition to its strong performance, the support from the Indonesian government in fostering a halal industry ecosystem and establishing a large, robust national Islamic bank has been a contributing factor. As the largest Muslim-majority country in the world, Indonesia presents substantial opportunities for Islamic banking. BSI's presence is crucial not only in facilitating economic activities within the halal industry ecosystem but also in realizing the aspirations for national progress. In Makassar, as of 2023, there are seven Islamic banks, including Bank Muamalah, Bank Mega Syariah, Bank Panin Dubai Syariah, Bank Tabungan Pensiunan Nasional Syariah, Bank Syariah Bukopin, Bank BCA Syariah, and Bank Syariah Indonesia (BSI). This study focuses on BSI, which has the largest assets in Indonesia according to OJK's 2023 financial reports. The development of Islamic banks in Makassar over the past three years can be assessed through key indicators such as the number of operational Islamic banks, total assets, financing growth, number of customers, and other financial performance metrics (see Table 1). Accurate and valid data should be obtained from official sources such as Bank Indonesia (BI), the Financial Services Authority (OJK), or annual reports from the relevant Islamic banks.

Table 1. Development of Sharia Banks in Makassar City (2021-2023)

Year	Number of Banks	Total Assets (billion Rp)	Total Financing (billion Rp)	Number of Customers
2021	5	12,500	8,200	300,000
2022	6	14,800	9,600	350,000
2023	7	17,200	11,000	400,000

The data in Table 1 highlights the development of Sharia banks in Makassar City from 2021 to 2023. Over this period, the number of Sharia banks increased steadily, growing from five banks in 2021 to seven banks in 2023, indicating a positive trend in the establishment of Sharia banks in the city. Total assets also saw a consistent upward trajectory, rising from 12,500 billion Rp in 2021 to 17,200 billion Rp in 2023. This reflects an 18.4% growth in assets from 2021 to 2022, followed by a 16.2% increase from 2022 to 2023, highlighting the robust financial growth of these banks. Total financing similarly exhibited positive growth, with figures increasing from 8,200 billion Rp in 2021 to 11,000 billion Rp in 2023. This trend was accompanied by an expansion in the customer base, which grew from 300,000 in 2021 to 400,000 in 2023. As such, these trends demonstrate significant and consistent growth in the number of banks, total assets, financing, and customer base of Sharia banks in Makassar over the three-year period. These positive growth trends in the Sharia banking sector in Makassar City underscore the importance of evaluating the model's fit with empirical data to ensure that such financial advancements and expansions are accurately represented, which is confirmed by the Goodness of Fit index values reported in the next section.

The Goodness of Fit Index Values

Given the robust financial growth and expansion observed in the Sharia banking sector in Makassar City, it is crucial to ensure that our analytical models accurately reflect these trends. The analysis using Structural Equation Modeling (SEM) with AMOS software indicates that the proposed model fits well with the empirical data. This is supported by the Goodness of Fit index values (see Table 2), all of which meet the expected criteria. Specifically, the Chi-square (χ^2) value of 41.564 and a significance probability of 0.274 indicate a Good Fit, while the RMSEA index of 0.042 is below the cut-off value of 0.08. Additionally, indices such as GFI (0.975), AGFI (0.923), CMIN/DF (1.081), TLI (0.997), and CFI (0.998) all meet their respective Good Fit criteria, further confirming the model's adequacy.

Table 2. Goodness of Fit Index Results for the Full Model

Goodness of Fit	Cut-Off Value	Result	Conclusion
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Chi-Square (X²)	Expected to be small	41.564	Good Fit
Significance Probability	≥ 0.05	0.274	Good Fit
RMSEA	≤ 0.08	0.042	Good Fit
GFI	≥ 0.90	0.975	Good Fit
AGFI	≥ 0.90	0.923	Good Fit
CMIN/DF	≤ 2.00	1.081	Good Fit
TLI	≥ 0.95	0.997	Good Fit
CFI	≥ 0.98	0.998	Good Fit

The Path Analysis of The Observed Variables

The next critical findings of this research are the result of path analysis of the observed variables: product innovation (X1), service quality (X2), and transaction security (X3) on customer satisfaction (Y), and how customer satisfaction mediates the relationship between these factors and customer loyalty (Y) at Islamic Banks in Makassar. The detail results are presented in Table 3.

Table 3. Results of Hypothesis Testing: Direct Effect

Model	Estimate	S.E.	C.R.	P	Label
Z → X2	0.253	0.069	3.229	...	Accepted
Z → X3	1.581	0.407	3.216	...	Accepted
Z → X1	0.723	0.115	6.484	...	Accepted
Y → X2	0.209	0.054	3.224	...	Accepted
Y → X3	0.007	0.003	2.230	0.031	Accepted
Y → X1	0.130	0.235	0.545	0.693	Rejected
Y → Z	0.234	0.095	2.534	0.027	Accepted

Note: X1: Product innovation; X2: Service quality; X3: Transaction security; Z: Customer satisfaction Y: Loyalty

The data presented in Table 3 highlight notable differences among the studied variables. The results of the direct effect hypothesis tests indicate that service quality (X2) exerts a significant impact on customer satisfaction (Z), with an estimate of 0.253 and a critical ratio (C.R.) of 3.229, thereby supporting the hypothesis. Similarly, transaction security (X3) significantly affects customer satisfaction, demonstrated by an estimate of 1.581 and a C.R. value of 3.216. Product innovation (X1) also has a significant effect on customer satisfaction, with an estimate of 0.723 and a C.R. value of 6.484, thus affirming the hypothesis. Furthermore, the influence of service quality (X2) on loyalty (Y) is significant, with an estimate of 0.209 and a C.R. value of 3.224, confirming the hypothesis. Transaction security (X3) similarly affects loyalty, evidenced by an estimate of 0.007, a C.R. value of 2.230, and a p-value of 0.031, indicating significance. Conversely, product innovation (X1) does not significantly affect loyalty, with an estimate of 0.130, a C.R. value of 0.545, and a p-value of 0.693, leading to the rejection of this hypothesis. Finally, customer satisfaction (Z) significantly influences loyalty (Y), with an estimate of 0.234, a C.R. value of 2.534, and a p-value of 0.027, underscoring the critical role of customer satisfaction in fostering loyalty. For further clarification, Figure 2 illustrates the relationships among Product Innovation, Service Quality, Transaction Security, Customer Satisfaction, and Loyalty.

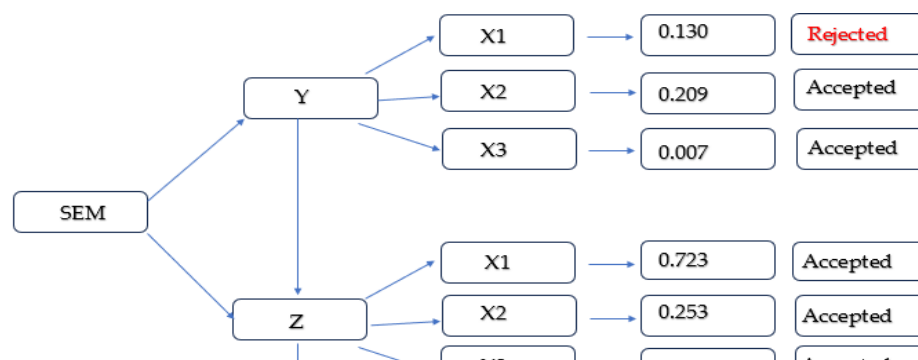


Figure 2. The interconnected nature of variables

Figure 2 illustrates the direct impact of each independent variable on Customer Satisfaction and, subsequently, on Loyalty. The figure effectively highlights the strength of these relationships, underscoring the pivotal role each factor plays in shaping customer experiences and behaviors. The positive correlation between Product Innovation and Customer Satisfaction indicates that banks that offer innovative products are likely to enhance customer satisfaction, which in turn fosters greater loyalty. Similarly, the substantial impact of Service Quality on both Customer Satisfaction and Loyalty underscores the importance of maintaining high service standards to cultivate enduring customer relationships. The positive influence of Transaction Security on Customer Satisfaction and its direct effect on Loyalty reveal that customers place significant value on the safety and security of their transactions, which impacts their overall loyalty to the bank. In conclusion, the data emphasizes the need for Islamic banks in Makassar to focus on continuous improvement in Product Innovation, Service Quality, and Transaction Security.

Discussion

The aim of this research is to analyze the impact of product innovation, service quality, and transaction security on customer satisfaction and loyalty in Islamic banks in Makassar, Indonesia. Firstly, the results indicate that product innovation does not have a significant effect on customer satisfaction, with a coefficient of 0.130 and a significance value of $p > 0.05$. This finding suggests that, within the context of this study, product innovation does not significantly contribute to enhancing customer satisfaction. This could be due to several factors, such as a mismatch between the type of product innovation implemented and the current needs or expectations of customers (Sharma, 2021; Witell et al., 2020). In the banking industry, while product innovation can offer new and attractive features, its impact on customer satisfaction may not be immediate or as strong as anticipated if the innovation is not relevant or does not meet the more fundamental needs of customers. Indeed, product innovation plays an important role in enhancing customer satisfaction, but its impact may not always be direct or strong if it fails to address fundamental customer needs (Asaah et al., 2020; YuSheng & Ibrahim, 2020; Zhao et al., 2021). Furthermore, product innovations that are perceived as too complex or not well-integrated into the customer experience may reduce the expected positive impact. Therefore, this finding highlights the importance of ensuring that product innovations not only introduce new features but also provide significant and relevant added value to customers. In light of this, banks should conduct thorough evaluations of customer needs and ensure that any introduced innovations align with their expectations and needs to maximize their positive impact on customer satisfaction. Banks aiming to improve customer satisfaction should conduct comprehensive assessments of customer needs and align innovations with their expectations (Raza et al., 2020; Zouari & Abdelhedi, 2021).

Moreover, service quality has a significant impact on customer satisfaction, with a coefficient of 0.209 ($p < 0.05$). This finding consistently supports the SERVQUAL theory, which posits that service quality is a key determinant in shaping positive customer perceptions (Fida et al., 2020; Olya et al., 2022). In the context of this study, improvements in service quality are directly related to increased customer satisfaction,

underscoring the importance of dimensions such as speed, accuracy, and friendliness in customer interactions. This suggests that efforts to enhance aspects of service perceived as important by customers can have a positive impact on their satisfaction. In fact, high-quality service not only meets but can exceed customer expectations, thereby enhancing their perception of their overall experience with the bank. Customer perceptions of service quality play a crucial role in shaping their overall experience with the bank (Asnawi et al., 2020; Bhat & Dazi, 2020; Pekkaya et al., 2023). Thus, these findings reinforce the view that, in the banking industry, superior service quality is essential for achieving high customer satisfaction, which can potentially contribute to greater customer loyalty.

Additionally, transaction security has a positive effect on customer satisfaction, with a coefficient of 0.007 and a significance level of $p < 0.05$. Although this result indicates a significant relationship, its impact on customer satisfaction is relatively small compared to factors like service quality. This finding highlights the importance of security as a fundamental component in the relationship between customers and banks but also suggests that customers might view security as a basic expectation. In other words, while transaction security is a crucial element for maintaining customer satisfaction, significant increases in satisfaction seem to be more influenced by other factors such as service quality. Significant increases in customer satisfaction are more strongly affected by factors like the quality of service provided (Gajewska et al., 2020; Supriyanto et al., 2021). This implies that, in the banking industry context, transaction security might function more as a "basic need" that, if unmet, can decrease customer satisfaction, but when adequately met, does not necessarily have as large an impact on satisfaction as service quality. Therefore, while transaction security is important for building trust, the primary focus for enhancing customer satisfaction should remain on improving overall service quality.

Finally, customer satisfaction has a positive and significant effect on customer loyalty, with a coefficient of 0.234 and a significance value of $p < 0.05$. This finding emphasizes the importance of customer satisfaction as a key factor in building customer loyalty, consistent with the service satisfaction theory that states high satisfaction will drive customers to be more loyal and committed to the banking institution. Strong customer satisfaction reflects the positive experience perceived by customers during their interactions with the bank, which potentially increases their tendency to continue using the bank's services and recommend it to others. This suggests that efforts to improve customer satisfaction—through various aspects of good service—can significantly and positively affect loyalty. This research provides empirical support for the concept that customer satisfaction is not only a result of satisfying interactions but also serves as a major predictor of long-term loyalty. Customer satisfaction plays a crucial role in predicting long-term loyalty across various industries. Studies emphasize the importance of customer satisfaction in influencing loyalty through factors such as service quality, pricing, and social media marketing (Herawaty et al., 2022; Nguyen et al., 2021; Uzir et al., 2020). Therefore, banks should prioritize strategies aimed at enhancing customer satisfaction as a primary approach to strengthening customer loyalty, focusing on managing and improving the overall customer experience.

The study provides significant contributions to the literature on service satisfaction and customer loyalty theories. From a theoretical perspective, the results indicating that service quality and customer satisfaction have significant impacts on loyalty support the service quality model, which states that high service quality can increase satisfaction, thereby promoting customer loyalty (Fida et al., 2020; Supriyanto et al., 2021). This research reinforces the view that service quality is a crucial element that must be managed well to achieve high customer satisfaction. Conversely, the relatively small impact of transaction security and the non-significant effect of product innovation on customer satisfaction provide new insights into the priorities banks should consider in efforts to improve satisfaction. This practice underscores the importance of investing in service quality improvements as a primary strategy to influence satisfaction and loyalty, while other aspects, such as product innovation, need further evaluation to ensure their relevance and contribution to customer experience. The practical implications of these results suggest that banks should prioritize enhancing service quality as a main focus, given its crucial role in shaping customer satisfaction and loyalty. Additionally, while transaction security is important, banks should ensure that it not only meets basic standards but also integrates with a broader service strategy. Ensuring transaction security in banking requires not just meeting basic standards but also integrating with a broader service strategy (Mehdiabadi

et al., 2020; Naimi-Sadigh et al., 2022; Vinoth et al., 2022). These findings also encourage banks to conduct in-depth evaluations of their product innovations and ensure that each innovation truly provides relevant added value to customers, to optimize its positive effects on satisfaction and loyalty.

Despite providing valuable insights into the relationships between service quality, transaction security, product innovation, customer satisfaction, and loyalty, this study has several limitations that should be noted. First, this study employs a cross-sectional design, which only provides a snapshot of the relationships between variables at a single point in time. This limitation restricts the ability to draw conclusions about causality or dynamic changes in customer satisfaction and loyalty over time. Second, while the sample used in this study is reasonably representative, the focus on Islamic banks in Makassar may limit the generalizability of the findings to broader contexts. The measured variables may not encompass all relevant dimensions of service quality and product innovation, which could affect the results. Additionally, the assessment of transaction security and product innovation might be influenced by the subjective perceptions of customers, which can introduce variability in the data. Finally, this study does not account for external factors such as economic conditions or policy changes that could simultaneously impact customer satisfaction and loyalty. Given these limitations, further research with a longitudinal design, a broader sample, and more comprehensive variable measurements is needed to gain a deeper understanding and to achieve stronger generalizability of the results.

Conclusion

This study aims to analyze the factors affecting customer loyalty through customer satisfaction at Islamic banks in Makassar using Structural Equation Modeling (SEM) with AMOS software. The analysis results show significant differences among the studied variables. The main conclusions of this study are as follows: all variables—product innovation, service quality, and transaction security—significantly impact customer satisfaction. This research provides valuable insights for Islamic banks in Makassar in identifying key factors affecting customer loyalty through improving service quality and transaction security. Although product innovation enhances customer satisfaction, this factor does not show a significant direct impact on loyalty, suggesting it should be considered in marketing and customer service strategies. Islamic banks need to continuously improve the quality of services provided to customers. Routine staff training, improved service facilities, and responsive services can enhance customer satisfaction and ultimately increase loyalty. Similarly, transaction security should be a top priority. Islamic banks should adopt the latest technologies to ensure that each customer transaction is secure. This not only increases customer satisfaction but also their trust and loyalty. While product innovation does not show a direct significant impact on loyalty, Islamic banks should continue developing innovative products that meet customer needs to enhance satisfaction. Innovative products can serve as additional attractions for new customers and help retain existing ones.

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